Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

October 2, 1961

CHEMICAL BILLS: HOW THEY FARED

TALLY SHEET IN CONGRESS

PAGE THREE

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A CONGRESSIONAL TALLY

How Chemical Bills Fared on Capitol Hill

	BILL NO.	PURPOSE	WHAT HAPPENED
Agricultural Research	S 7, S 173, HR 889	To expand industrial uses of farm products.	**No action.**
Alien Property	S 760	To permit sale of General Aniline & Film Corporation.	**No action.**
Antitrust	S 366, HR 2882	To require pre-merger notification.	**No action.**
	S 167	To require production of documents in pre-trial civil antitrust cases.	**Passed senate.**
	HR 11, HR 3465	To provide for compulsory functional discounts.	**Hearings only.**
	HR 1233, HR 1817	To permit Federal Trade Commission to issue temporary cease-and-desist orders.	**No action.**
	HR 8603	To provide for publicity by Justice Department of identical bids.	**Passed house.**
	HR 7228	To allow government to intervene in private antitrust actions.	**No action.**
	HR 7230	To provide for pre-publication of proposed antitrust consent decrees.	**No action.**
	S 996, S 2252-3-4-5	Five bills to increase penalties and responsibilities of corporate executives.	**Hearings only.**
Food and Drugs	HR 1235	To require pre-testing of cosmetics and a general overhauling of food, drug and cosmetics law.	**No action.**
	HR 3980	To extend effective date of food additives law to June 30, 1964.	**Signed into law.**
	HR 3737	To set up information requirements for drug advertisements.	**Hearings only.**
	HR 6011	To set up commission to investigate hazards of food chemicals.	**No action.**
	S 1552, HR 2882	Kefauver-Celler drug industry antitrust bill.	**Hearings only.**
	S 1939	To tighten restrictions on barbiturates and amphetamines.	**No action.**
Government	S 1688	To create Department of Consumers.	**Hearings only.**
Mining	HR 84	To provide subsidy for small lead-zinc producers.	**Passed senate and house.**
	HR 2210	To create Department of Minerals.	**No action.**
Patents	S 1084, S 1176	To deal with government ownership of patents developed from government research funds.	**Hearings only.**
	HR 7731, S 2225	To increase patent fees.	**No action.**
Pollution	S 453	To extend air pollution law and authorize hearings.	**Passed senate.**
	HR 924	To authorize accelerated amortization of cost of pollution abatement facilities.	**No action.**
	HR 6441, S 120	To broaden authority of water pollution law.	**Signed into law.**
	HR 3083	To remove ceiling on air pollution research funds.	**No action.**
Tariffs	HR 9189	To revise tariff classifications.	**Ordered reported.**
	S Res 206	To authorize Tariff Commission investigations of lead-zinc, fluorspar, mercury, etc.	**Passed senate; house action unnecessary.**
Taxes	HR 1148	To limit rights of states to tax interstate sales.	**No action.**
	HR 3162	To permit tax credits on funds for scientific research.	**No action.**
	HR 8847	To ease taxes on duPont stockholders in duPont-GM antitrust case.	**Passed house.**
	HR 7446	To extend excise taxes one year.	**Signed into law.**
Transportation	S 1284	To repeal bulk carrier exemption for water carriers.	**No action.**
	S 1197	To tighten new railroad rate-making rule.	**Hearings only.**
Wages-Hours	HR 3935	To raise minimum wage.	**Signed into law.**
Water	HR 7916	To broaden saline water research program.	**Signed into law.**

Chemical Industry Battleground: That's What Adjourned Congress Promises for Coming Session

The first session of the eighty-seventh congress has come to a relatively quiet conclusion, but chemical leaders are already thinking about the next one, for they are sure that the second session is going to be the real battleground for their industry. Controversies are sure to break out over such important issues as new regulations for the marketing of pharmaceuticals, medical care for the aged, tighter control over patents and far-reaching policies on tariffs and trade.

During the last session, thousands of bills—some of them a real threat to the chemical industry—made their usual appearance on the legislative scene, but hardly a handful ever advanced beyond the stage of introduction.

Last session's troubles for the chemical industry were not so much concerned with legislation introduced in congress as they were with regulatory matters growing out of legislation enacted in previous congresses.

Additives, Labeling the Chief Concerns

Regulations concerning food additives, color additives and the labeling of hazardous household articles were the prime focal points of the industry's concern with the doings in Washington during the nine months congress was in session.

And at least one of these promises to spill over into the next session when congress returns to Washington January 10. This is with reference to the regulations for labeling hazardous articles.

It is more than probable that more time will be needed by companies affected by the law to revise their labels and bring them into compliance. A request is already before the appropriate senate and house committees from the chemical industry for a twelve months' extension of the law. The industry has a promise that the legislation will be expedited if found needed.

Experience has shown, however, that congress has a somewhat strange conception of the meaning of the term "expedite" at times, and if the legislators follow their usual pattern, manufacturers with unsolved labeling problems can expect to find themselves still facing uncertainties when the deadline rolls around next February 1.

Food additives producers vividly recall the procrastinations of the session just ended. The three years and three months extension of the food additives law voted last session, which everyone agreed was necessary even before congress met, didn't get through until the law had long since become effective.

Aside from the food additives extension bill, the chemical industry's interest in the past session was centered largely on these matters:

The Kefauver-Celler drug bill with its proposed vital changes in the patent laws, changes in the tax laws to ease the tax

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MCA Former Head Is US Arms Control Chief

President Kennedy has appointed William C. Foster director of the newly-created United States Arms Control & Disarmament Agency.

Mr. Foster, a one-time president of the Manufacturing Chemists' Association, was formerly an executive vice-president of Olin Mathieson Chemical Corporation. More recently he has served as president of United Nuclear Corporation, a firm set up by Olin, Nuclear Development Corporation of America and Mallinckrodt Chemical Works.

The new agency, which was signed into law last week, has been given $1 million in State Department funds to conduct research into all phases of disarmament.

DuPont-GM Measure Gets Priority, But . . .

The tax relief bill (HR 8847) in the E. I. duPont de Nemours & Co.-General Motors Corporation antitrust case will be the first order of business when the senate returns to session next January 10. But whether it will be the first bill enacted is something else again.

Just before congress adjourned the session sine die last week, senate leaders entered into an agreement saying that the duPont bill will be continued as the "unfinished business" of the senate when it reconvenes, but with the understanding that it will not be taken up for consideration until January 15.

Then, it will be debated in earnest and an attempt will be made to dispose of it one way or another.

The agreement was reached when the opponents— chiefly Senators Albert Gore of Tennessee and Paul Douglas of Illinois —successfully blocked the senate from voting on the bill before adjournment by filibustering tactics. They insisted that the bill not be passed until the District Court in Chicago has ruled on the stock dives-

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Chemical Marketing Cues . . .

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37 DDT: In the midst of boom, a rich new market looms—Africa.

47 EPOXY ADHESIVES: Are they ready for big-volume industrial applications?

Chemical Industry's R&D Bill: More Than $1 Billion for 1960

The American chemical industry went over the $1 billion mark last year to establish a record high in funds for research and development. And the increase was not all due to heavier financing in this area by the government. The industry itself accounted for the larger part of the increase. National Science Foundation, in a report on research and development expenditures by all industries, says the chemicals business spent $1,047 million last year, topping the 1959 total by $98 million.

Compared with such expenditures in 1959, the industry has increased its budgets in this area by 69 percent.

Drug Makers the Leaders

Percentage-wise, producers of drugs and medicines were among the leaders in boosting research and development expenditures over a five-year period. The R&D budget for this group rose 79 percent, from $94 million in 1956 to $168 million last year. In 1959 the total was $147 million.

The bulk of the R&D money in the chemical industry, of course, was spent in the areas of industrial chemicals. Last year's total was estimated by the foundation at $737 million, compared with $676 in 1959 and an increase of 69 percent over the 1956 total of $437 million.

For other chemical groups, the total last year was $143 million, an increase of 61 percent over the 1956 total of $89 million. The comparable total for 1959 was $126 million.

The foundation says that these figures on R&D performance do not tell the whole story of the amount being spent by the chemical industry in this area.

The survey did not cover company-financed research and development contracted to such outside organizations as such colleges and universities and research institutes.

The amount of this outside financing is particularly significant, it is stated, for such industries as drugs and medicines.

The amount of R&D performance in chemicals and related products that was

—Continued on page 30

Chemical Breakthrough: A Waterproof Raincoat

The raincoat that no longer repels rain after a trip or two to the cleaners may be a thing of the past, according to government researchers.

When treated with a water-repellent called "Quarpel," recently developed by army scientists, a garment reportedly increases its absorption by only 3.2 percent after fifteen field laundries.

Present army specifications, realistically geared to the garments available, allow only a maximum increase of 35 percent after only one laundering.

"Quarpel" combines a quaternary ammonium salt with a nonionic fluorocarbon in two-to-one ratio.

Pfizer Absorbs Globe, Price Up $.5 Million

Chas. Pfizer & Co. raised its bid last week and succeeded in acquiring Globe Laboratories, Inc., a Fort Worth, Tex., maker of animal vaccines and veterinary products.

Pfizer's succesful bid was 60,000 shares of its common stock, worth $2.3 million at current market values.

This, together with the prestige of the New York drug maker, weighed heavier in the scales than a bid by rival Alcan Laboratories, which was reportedly worth $2.4 million.

The acquisition became effective Tuesday (September 26) after Globe stockholders had approved the deal on Saturday. Globe will be operated as a division of Pfizer with its present management roster unchanged.

Last month Pfizer had offered to buy

—Continued on page 33

Sodium Citrate Is Added To Miles' Chemical Line

Miles Chemical Company, Elkhart, Ind., one of two major suppliers of citric acid in this country, has just added sodium citrate to its product roster. The material is being made available in powder, granular and fine granular forms, all USP.

Marketing is expected to cover a broad range of applications in the food and beverage, pharmaceutical and industrial fields.

Copper Sulfate Is Wanted; Estimated at $1.6 Million

Bids have been invited by the Agricultural Bank of Greece for supply of 8,000 metric tons of crystalline copper sulfate estimated to cost $1.6 million, Department of Commerce reports.

The copper sulfate should be 98 to 100 percent pure dry crystals, either fine or coarse grain, grindings excluded, packed in new jute bags of 100 kilograms gross weight or in wooden barrels of up to 200 kilograms, net weight.

Bids should reach the Permanent Suppliers Committee, Agricultural Bank of Greece, 23 Venezelos Street, Athens, before 11:30 a.m., October 20.

Vinyl Chloride Going Up

Allied Chemical Corporation's Solvay Process Division will raise the price on vinyl chloride monomer one-half cent a pound on November 1. The new tankcar quotation will be 8 cents a pound, f.o.b. its Moundsville, W. Va., plant.

The Week's Price Changes

Corn Oil, Lemongrass Oil, Olive Oil, Tung Oil Advanced. Carnauba Wax, Geranium, Molasses, Tangerine Reduced.

Prices Advanced

Corn oil, crude, 1c. per lb. (p. 52)
refd., 1c. per lb.
Lemongrass oil, 40c. per lb. (p. 48)
Olive oil, spot, 5c. per gal. (p. 52)
Tin, Straits, ½c. per lb. (p. 29)
Tung oil, ¼c. per lb. (p. 52)

Prices Reduced

Carnauba wax, No. 2 crude 1c. per lb. (p. 52)
No. 3 ceara, 2c. per lb.
Parnahyba, 2c. per lb.
Yellow, No. 1 2c. per lb.
Coconut oil, crude ½c. per lb. (p. 52)
Copra, $2.50 per ton (p. 52)
Cotton seed oil, crude ½ per lb. (p. 52)
refd., ½c. per lb.
Geranium, Bourbon, $1 per lb. (p. 48)
Molasses, N. O., ½c. per gal. (p. 35)
Lard, cash, ½c. per lb. (p. 52)
Peanut oil, crude ½c. per lb. (p. 52)
refd., ½c. per lb.
Soybean meal, 50c. per ton (p. 52)
Tangerine, 50c. per lb. (p. 48)

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Sept. 29 1961	Sept. 22, 1961	Sept. 30, 1960
113.71	113.74	109.65

Chemicals Just Soak Up Water

Chemical processing is a thirsty operation, but it still ranks second behind treatment of primary metals in the quantity of water consumed by industry. Figures just compiled by Bureau of the Census show that the chemical industry had a water intake for all purposes in 1959 of 3,240 billion gallons, as compared with 3,702 billion for the metals group. The figures were compiled from reports of concerns using 20 million gallons of water or more annually.

Gross water used by chemical makers, including re-circulation or re-use of water, totaled 5,225 billion gallons in 1959, and the amount of water discharged was 3,061 billion gallons.

Comparable figures for the metals group were 5,673 billion gallons gross, and 3,551 billion gallons discharged.

In 1954, when the last previous survey was made, the chemical and related products industry reported a water intake of 2,685 billion gallons, a gross water consumption of 4,295 billion gallons and a discharge of 2,550 billion gallons.

Re-circulation of water in 1959 was greatest for the paper and allied products group. Gross water used by this industry totaled 6,054 billion gallons against a water intake of 1,937 gallons. The amount of water discharged was 1,824 billion gallons.

HAS NEW DUTIES: Dr. Gino P. Giusti, assistant to the president of Texas Gulf Sulphur Company, New York, takes on the additional position of market research manager.

Goodrich, Aussie Partner Complete Vinyl Resin Unit

B. F. Goodrich Chemical Company and an Australian partner have completed a $3.5 million vinyl resins plant at Altona, near Melbourne. The facility is being operated by B. F. Goodrich CSR Chemicals Pty., Ltd., a company formed last year by the Cleveland, Ohio firm and CSR Chemicals Pty., Ltd., of Sydney.

The Australian partner firm has been actively associated with plastics for many years and also manufactures plasticizers for polyvinyl chloride.

Raw materials used to produce BFG's "Geon" vinyls will come chiefly from other manufacturing facilities at the Altocna complex, BFG reports.

Polypropylene Lures Allied

Allied Chemical Corporation's Plastics Division intends to get into the polypropylene market on November 1, according to a statement issued by the New York-based corporation today (October 2). Its marketing demands will be supplied through a working arrangement with a present manufacturer producing materials to Allied's specifications. The products will be marketed by Allied under the tradename "Plaskon" polypropylene.

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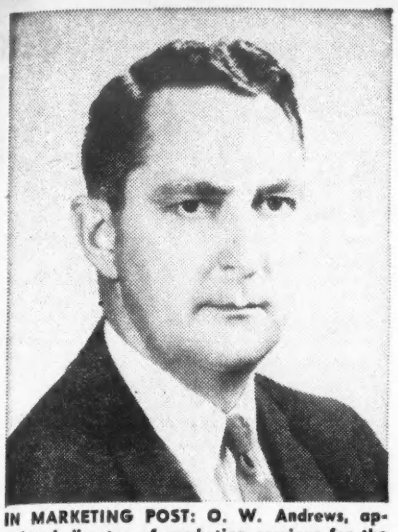

IN MARKETING POST: O. W. Andrews, appointed director of marketing services for the chemical division of Pittsburgh Plate Glass Company, Pittsburgh, Pa.

Propylene Capacity Being Hoisted by Sun

An analysis of the propylene market may be found in the aliphatic organics report on page 35.

Sun Oil Company will expand propylene capacity by 150 percent, to 300 million pounds annually, at its Marcus Hook, Pa., refinery by the second quarter of 1962. Full design capacity will be reached on completion of a $14 million catalytic cracking unit in October of next year.

The propylene is destined for polypropylene plants of AviSun Corporation at New Castle, Del., and Port Reading, N.J., and Shell Chemical Company at Woodbury, N.J.

Right now, AviSun's polypropylene capacity, including that for the just-dedicated New Castle plant, exceeds 125 million pounds annually (OPD, 9/25/61).

Shell's planned potential at Woodbury is 80 million pounds annually, scheduled to go on stream in mid-1962.

At a glance, it can be seen that the propylene capacity of 300 million pounds will exceed polypropylene capacity of consumers by some 95 million pounds, causing trade observers to conjecture that more polymer expansion might happen in the not too-distant future.

Construction of the new facilities at Marcus Hook, slated to begin in November, will cost $2.2 million. A $9.3 million gas processing plant, to be completed about the time construction of the new plant begins, will provide charging stock.

A major part of the additional polypropylene unit will consist of two 158-foot distillation towers, each weighing 209 tons and eleven and a half feet in diameter.

The tower will contain 160 fractionating trays which weigh a total of 22,000 pounds, and will purify propylene to the requisite 99.4 percent purity. Sun Shipbuilding & Dry Dock Company, a Sun affiliate, will build the towers.

Johnson & Johnson Sets Belgian Drug Acquisition

Johnson & Johnson, New Brunswick, N.J., has contracted to purchase Laboratoria Pharmaceutica Dr. C. Janssen NV at Turnhout, Belgium, and Research Laboratorium Dr. C. Janssen NV at Beerse, Belgium. Two Janssen affiliates in Holland and West Germany are also included.

Acquisition of the Belgian company is

—*Continued on page 49*

FDA Wins Dubious Distinction; It Is High on 'Investigated List' Of the Government's Agencies

Food & Drug Administration is rapidly gaining the dubious distinction of being one of the most investigated agencies of the federal government. First, it was the Kefauver committee which a year ago became interested in the affairs of the agency in connection with the committee's probing of drug prices. Next, it was the Kendall committee and then the National Research Council that made studies of its personnel and policies as a result of the Henry Welch affair. Now the General Accounting Office has gotten into the act.

The latter came to light last week when GAO sent a report to congress on a review it made just a year ago of FDA's enforcement and certification activities.

The inquiry was self-inspired because of the increased importance focused on activities bearing on the health of the public. Following are among the findings of the GAO:

Fee System Needs Revision

- The fee system employed by the Department of Health, Education & Welfare for certain services rendered to the drug industry should be reviewed by congress. As presently applied, it appears to be unfair to the industry. Either fees should be charged for all services, or not at all.
- FDA could do a better job of allocating its available skilled manpower among the various drug control programs under its jurisdiction, and promises to look into this.
- There can and should be closer coordination between FDA and the state and local health agencies.
- If certification fees are to be imposed, then the basis of computing the fees should be changed so as to cover all costs, including the cost of government-owned space given over to this work.

GAO says that the policy of charging fees for services rendered as it relates to certification, testing and licensing activities administered by HEW is not being applied on a uniform basis.

Fees are imposed, in accordance with law, for the pre-testing and certification of antibiotic drugs and insulin, the listing of color additives and certification of batches of such colors and the establishment of tolerances for residues of pesticide chemicals.

"However," is is noted by the agency, "certain other activities are performed by HEW, such as regulation of biological products (by Public Health Service), review and approval of new drug applications and regulation of food additives, for which no fees are assessed against the affected industries.

"The fundamental purpose of these activities is to provide assurance that the

—*Continued on page 51*

Potash Mining Boom Draws Kerr-McGee and Farm Firm

Kerr-McGee Oil Industries, Inc., Oklahoma City, Okla., and National Farmers Union Service Corporation, Denver, Colo., are forming a new company to mine and mill reportedly extensive potash reserves near Carlsbad, N. M. The new enterprise, Kermac Potash Company, will be a partnership in which a wholly-owned subsidiary of each parent company will have a 50 percent interest.

A large-scale pilot plant program is being launched immediately at Kerr-McGee's metallurgical research laboratory at Golden, Colo., to complete engineering and design plans and specifications for a 1,500-ton-a-day potash plant. Construction is to be started at the earliest possible date. Kerr-McGee will be operating partner for all phases of the new venture.

COMPANY HEAD: Robert C. Hills, elected president of Freeport Sulphur Company, New York, succeeding Charles A. Wight, who has become vice-chairman of the board.

Diamond Alkali Buys Fiber Chemical Corp.

Diamond Alkali Company, Cleveland, Ohio, has just picked up Fiber Chemical Corporation, Cliffwood, N.J., a producer of organic chemicals and inorganic specialties that last year did a business of $1.5 million.

Fiber Chemical will be operated as a wholly-owned subsidiary, with A. B. Tillman, Diamond's general manager, soda products-chrome division, as president of the newly-acquired unit.

Felix F. Axelrad, Fiber's founder and president, will remain with the subsidiary as director of research and development.

The new unit, which was acquired through an exchange of stock, is a supplier for the detergent, paper, textile and leather markets. It will be operated as part of Diamond's soda products-chrome division.

George V. DuPont, special staff assistant at Diamond, will assume the responsibility of vice-president of the subsidiary and will be based at the Cliffwood plant. Secretary and treasurer will be Raymond H. Armor, Diamond's controller.

P&G Buys Up Three Lots Of Coconut Oil From GSA

Procter & Gamble Company, Cincinnati, Ohio, was the only successful bidder at last week's sale of coconut oil from the national stockpile conducted by General Services Administration. The firm won contracts for three lots of the oil totaling 7,192,849 pounds for an average price of 10.68 cents a pound.

A total of 13,410,969 pounds of the oil in five separate lots was offered for sale by the agency, but on two of the lots no awards were made.

P. A.'s Good News: Economic Upturn Is 'Accomplished'

This report was prepared by the Business Survey Committee of the National Association of Purchasing Agents.

Recovery from the 1960-1961 recession is now an accomplished fact; the "hoped for" better third quarter is a reality; and the anticipated "good" fourth quarter seems to be in the making. So say purchasing executives in their September report of business conditions.

New order and production figures are most encouraging this month. Last month our members told us that a "strong movement for the better was likely within the next sixty days." It would appear that this movement upward is under way and gathering momentum.

New orders set the pace, with a strong 58 percent reporting higher figures. Previous to this month, only three times in the last ten years has such a large percentage so reported (August 1955, September 1958, and April 1961), and only twice in the same period has the jump upward been as sharp. A very low 6 percent report new orders down. This is the lowest number so reporting since April 1955.

Production on the Upswing

This month, 51 percent show higher production figures, the highest percentage so reporting since May, 1959, while only 10 percent show production at a lower level.

	Better	*Same*	*Worse*
New Orders			
September	58	36	6
August	37	51	13
Production			
September	51	39	10
August	49	38	13

The possibility of an automobile strike was noted as a cloud on the horizon last month. This has now passed without serious effect, and purchasing executives seem to be looking ahead to the steel negotiations in mid-1962 as the next serious threat to the economy

Meanwhile, labor cost increases, sagging profits, prices, lengthening lead times, government spending and inflation seem to be uppermost in the buyer's mind.

Price levels in September showed a marked reaction to the quickening tempo of business activity. Members finding higher price tags in the market place climbed from 10 percent last month to 20 percent in September, the largest percentage so reporting since April 1960.

Those who say the prices they paid were largely unchanged still account for a substantial 74 percent, but this is down from last month's 83 percent, and only 6 percent say prices are lower. Indica-

—*Continued on page 43*

Hooker's Argentine Stake Gets Approval of Frondizi

Hooker Chemical Corporation's investment in Duranor, Industries Quimica Sociedad Anonima y Commercial, joint Argentine affiliate, has been approved by President Arturo Frondizi of Argentina.

Joint owner is Atanor, Compania Nacional Para La Industria Quimica, SAM, a major producer of chemicals and plastics. Duranor will be located at Rio Tercero, 450 miles northwest of Buenos Aires.

Granting of the decree signifies that the enterprise is considered necessary to the nation's economic development as provided in a special law covering foreign investments.

Koppers Will Expand Wood-Treating Plant

Koppers Company, Pittsburgh, Pa., is planing a major plant expansion at its Oroville, Calif., plant for commercial production of the company's new "Cellon" process for the pressure-treatment of wood.

According to present plans, construction of the new facilities will be completed early in 1962. Poles, crossarms and other wood products treated by the new "Cellon" process should be commercially available from Oroville in March, 1962.

Urethane Raw Materials: French Competition Aboiling

Competition in isocyanates and other urethane raw materials promises to come to a boil in France.

Farbenfabriken Bayer AG and its French associates—Progil, SA, and Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieres Electriques d'Ugine—are rushing to double their present production capacities

Goading them on, without a doubt, is a $6 million isocyanates plant, which E. I. duPont de Nemours & Co. and Etab. Kuhlmann, SA, expect to have in production by 1963.

Production of polyesters at Pont-de-Claix by Progil-Bayer-Ugine started in March and the company now plans to double polyester and polyether output to 1,000 tons monthly in 1962.

Production of toluene di-isocyanates, which is now reaching the level of 500 tons monthly, will be doubled to 1,000 tons monthly by the middle of next year.

Special isocyanates for use in paints and varnishes have been produced since July at the rate of 100 tons monthly.

DuPont and Kuhlmann formed Dekachimie in August to produce isocyanates in France (OPD, 8/21/61). Dekachimie expects to import chemicals from duPont in the US to start developing markets before its plant comes into operation.

Bayer and duPont discovered polyurethane plastics independently just before the war. Bayer moved into the US market in the mid-1950's with Mobay Chemical Company, a joint venture with Monsanto Chemical Company.

In addition to Dekachimie, duPont has set plans to produce isocyanates at its Northern Ireland chemical center for the UK market. Imperial Chemical Industries, Ltd., is the UK producer of isocyanates now.

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Isoniazid Use Broadened

Isoniazid, a drug widely used to treat tuberculosis, has now proved 80 percent effective in another area —that of preventing the disease among persons exposed to it.

The result has been obtained by Public Health Service in a just-completed survey of 12,000 household contacts of newly-discovered cases of tuberculosis.

"During the year after a new case was discovered, daily doses of isoniazid taken under medical supervision offered marked protection to household contacts during a period when they were at high risk of developing the disease themselves," PHS reports.

However, the agency notes, it is not yet known whether the protection lasts.

The findings embody preliminary results of one of three field trials begun four years ago and involving some 54,000 people in special risk groups.

Surveying each household a year after the source case was discovered, PHS found that those on the isoniazid regimen showed a tuberculosis rate of only 0.2 per thousand in contrast to a rate of six per thousand among the equal number who received dummy tablets.

To determine the durability of the protection, PHS will observe subjects of the study for several more years.

Among other results, PHS found "startling evidence" not only of the prevalence of the disease but of high risk of developing it. Upon initial examination, nineteen out of each thousand household contacts were found to have developed active tuberculosis, the government agency reports.

This, says Surgeon General Luther L. Terry, underscores the importance of promptly examining all

—Continued on page 61

OPD Reports From Europe

Chemical People Eye Integration And Ask Themselves: How Big?

How big is big enough, or how big is still too small? Those are tough questions in chemical economics, production and marketing and they are bothering continental and British chemical company executives who face the rapid pace of integration in the Common Market and its nearly certain expansion to include Britain. Part of the speculation is triggered by the continuing wave of mergers on the continent. Industry observers estimate that the merger of Societe Industriene de la Cellulose (Sidac), Union Chimique Belge and Fabelta, SA, in Belgium will create a company with an annual volume of $90 million to $100 million.

MANAGING SALES: Lorne MacBeth, named vice-president of Bristol Laboratories and director of marketing. Formerly with G. D. Searle & Co., he will be stationed in Bristol's New York headquarters.

While Sidac is absorbing the other two companies in an exchange of stock, the merged firm will operate under the Union Chimique name.

Broad Scope Is the Aim

The new Union Chimique will cover basic chemicals, plastics, plastic packaging products and artificial and synthetic fibers. It will have close links with Solvay Cie., the Belgium firm which claims to be Europe's leading producer of polyvinyl chloride plastic.

"But it won't be big enough," bluntly declares an English executive deep in planning to put his firm solidly into the continental chemical market.

There has already been speculation in Brussels financial centers that the merger announced so far is only the first step in a plan that will see major international

—Continued on page 32

Butanol Possibilities Appear Good to Dow

The nation's big butanol market ($15 million is the value put on it) is something that appeals to Dow Chemical Company. The Midland, Mich., company has just announced that it is out to capture a share of that business.

Normal-butanol and iso-butanol, organic solvents for industry, are now being produced at a new $2 million plant which

—Continued on page 61

Escambia Sets January 1 For Urea Plant Start-Up

Escambia Chemical Corporation will start production of urea solutions on January 1 at a new 20,000-ton-a-year facility in Pace, near Pensacola, Fla.

The plant's entire output will be used in Escambia's own "Bay-Sol" ammoniating solutions and "Ammo-Nite" direct application solution.

Ammonia and carbon dioxide, raw materials for the facility, are already in production at Escambia's Pensacola facility. The company has no plans at present for manufacturing solid urea.

In recent moves, Escambia increased its ammonia capacity by 15 percent and its storage capacity for nitrogen facilities by 30 percent.

Plastic Foam Trade's Dilemma: A Three-Fold Output Increase Can't Even Touch the Demand

Plastic foam output is heading for 740 million pounds annually by 1966, or triple the current annual rate of 248 million pounds. Even at that it won't match a projected demand level of 800 million pounds, according to a survey by E. I. duPont de Nemours & Co. Reporting the study, John C. Tallman, market researcher in duPont's development department, told chemical engineers last week that demand could rise even higher if producers take an imaginative rather than a "me too" tack in applications development.

Addressing a national meeting of the American Institute of Chemical Engineers at Lake Placid, N. Y., Mr. Tallman advised producers to "look beyond imitative uses where foam merely replaces some other material."

Wants Foam in Design

Rather, he said, a more creative approach would seek uses "where foam is designed into a product to capitalize on its unique properties and to permit important economies in production."

At the same time, Mr. Tallman warned producers of the detrimental effects of competition which in some cases has led to "quality reductions which might damage the reputation of foams and restrict their future growth."

Here's the 1966 end-use breakdown (in pounds) as duPont's researcher maps it:

Upholstered Furniture	140 million
Bedding	100 million
Seat Cushions in Vehicles	50 million
Other Automotive Uses	80 million
Textiles	20 million
Building Materials	85 million
Mobile Homes	20 million
Electrical Uses	50 million
Insulation	55 million
Packaging	30 million
Marine Flotation	24 million
Miscellaneous	90 million

Addressing the same meeting, J. R. Wall, of the Inland Division of General Motors Corporation, charted urethane's rapid progress in the automotive field.

Automotive use of urethane foam has grown from 10.3 million pounds in 1959 to 16.1 million this year, up 56 percent, he noted. Mr. Wall predicted that another advance to 19.5 million pounds would be scored by the end of 1963.

This will come about as urethane foam "takes over more volume from cotton and curled hair, as well as from rubber latex."

On polystyrene foam, G. C. Kiessling, of Koppers Company, cited an industry forecast that consumption will reach 90 million pounds by 1965.

He noted that "thanks to automatic molding machines, panel presses and ex-

—Continued on page 32

Fungicide Venture Is Slated By duPont, Spanish Firm

A jointly-owned Spanish company to manufacture and sell dithiocarbamate fungicides will be formed by Energia y Industrias Aragonesas SA, of Madrid, and E. I. duPont de Nemours & Co. of Wilmington, Del., subject to approval by the Spanish government.

The stock of the new joint company, Desarrollo Quimico Industrial SA, will be owned equally by Energia y Industrias Aragonesas and duPont. An application for approval to form the company has been filed with the Spanish government.

Desarrollo Quimico will build a plant at Sabinanigo, at the foot of the Pyrenees, adjacent to an existing plant operated by Energia y Industrias Aragonesas. The new plant is expected to start operation in 1962.

In addition to providing the plant site, Energia y Industrias will design and build the facility and provide employees to operate it. DuPont will provide manufacturing technology and basic engineering data.

ADVANCES: Miss Helen L. Booth, elected executive vice-president of the Drug, Chemical & Allied Trades Association, New York. Miss Booth had been the association's secretary.

Metal & Thermit Sets Its Sights on Udylite

The directors already like the idea, and if the stockholders do, too, Detroit, Mich.-based Udylite Corporation will become a division of Metal & Thermit Corporation, New York, and will continue to operate under the present Udylite management.

Plating materials and equipment furnish the common meeting ground for the two companies.

Metal & Thermit is a chemically-oriented company whose diverse operations include chemicals, coatings, minerals, chromium plating processes and materials, welding equipment and detinning.

Udylite is big in automatic plating machines, rectifiers and plating accessories. Through a subsidiary, Udylite Research Corporation, the firm says it has led the field in research and development of electroplating processes, particularly the bright nickel plating processes.

Another Udylite subsidiary, Frederic B. Stevens, Inc., is a supplier of foundry and building supplies.

Udylite reported net sales and other revenue of over $52 million for 1960. Consolidated net income for the year ended December 31, 1960, amounted to over $1

—Continued on page 54

Neville Chemical Acquires California Organics Concern

Neville Chemical Company, Pittsburgh, Pa., has acquired Western Organic, Inc. of Sante Fe Springs, Calif., and will operate it as a subsidiary.

A controlling interest in the firm was purchased by Neville from Magna Products, Inc., a subsidiary of Thompson Ramo Wooldridge, Inc.

As a unit of Neville, Western Organic will continue to manufacture chlorinated paraffins, paradichlorobenzene, orthodichlorobenzene, hydrochloric acid and allied products.

Free Drug Samples: $500,000 Worth Seized by FDA

A half-million dollars worth of free samples!

That is what Food & Drug Administration has just seized with the institution of thirty actions against sale of physicians' samples of prescription drugs in ten states.

And let there be no doubt about it, FDA's Commissioner, George P. Larrick, says the agency's drive against the mishandling of doctors' samples is going to go on—and on a nation-wide basis.

"Our continuing survey in this area is uncovering gross carelessness in the handling of extremely potent and life-saving drugs," the commissioner says.

"Our inspectors continue to report abuses such as:

"(1) Disregard for the expiration dates of antibiotics.

"(2) Mix-up of drugs not only as to identity but also with respect to strength.

"Destruction of essential labeling containing direction, warnings and precautions for the safe and effective use of the drug."

FDA says that inspectors have reported several instances in which firms had drugs intended only for investigational use on their shelves. They were labeled: "Caution. Limited by United States law to investigational use."

Distribution of such drugs is legal only to persons conducting research.

Mr. Larrick says that the abuses found are serious. He recommends the following action:

- Pharmaceutical manufacturers curtail

—Continued on page 31

Meeting Dates
May Be Found
On Page 9

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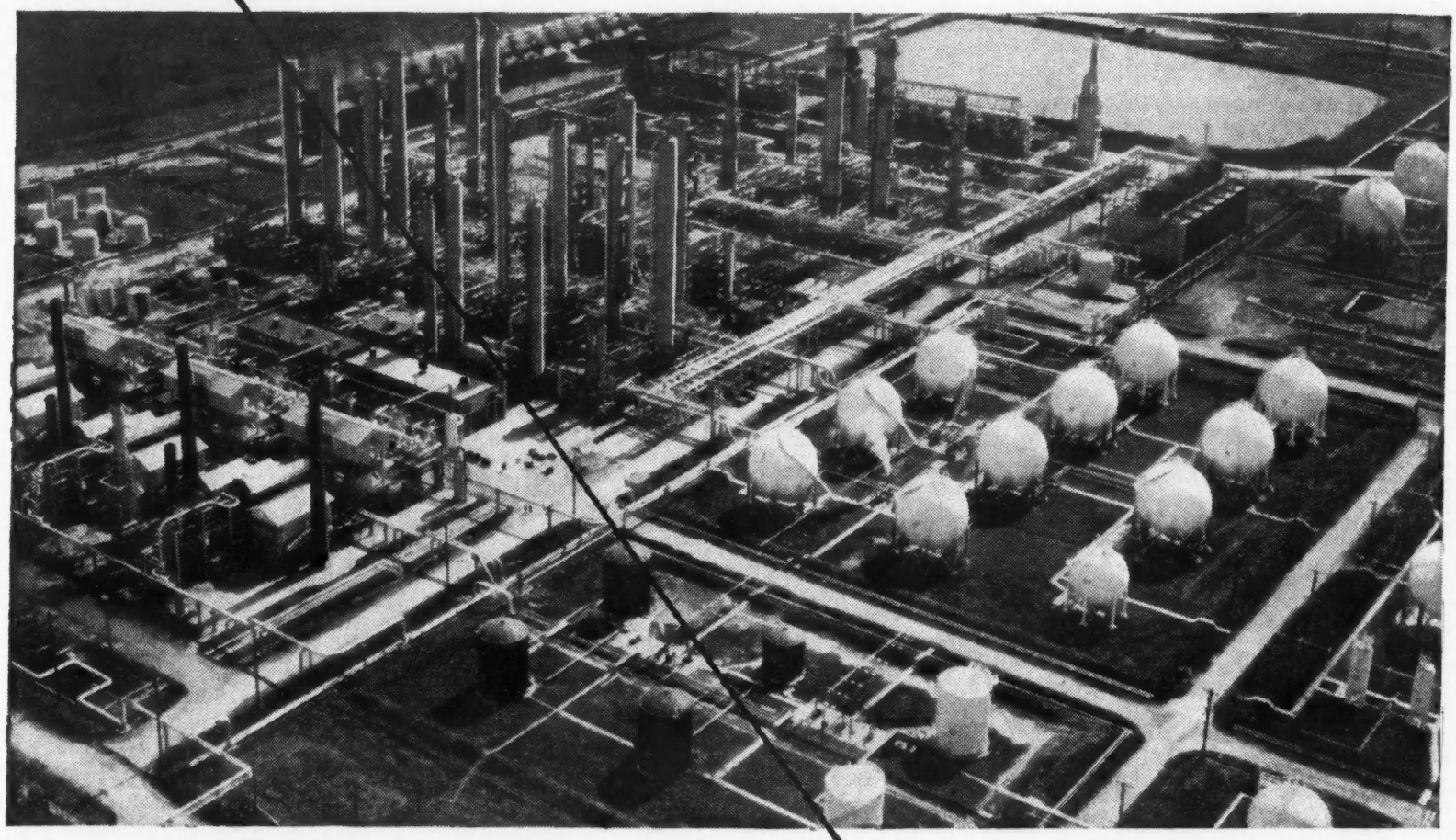

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A LOOK AT THE FIGURES

Chemicals Production: How It's Going

		July 1961	July 1960
Acetic Acid, Synthetic	lbs.	66,510,175	69,039,338
Acetone	lbs.	54,035,599	62,442,804
Ammonia, Anhydrous	tons	411,532	382,292
Benzene	gals.	45,422,588	34,535,135
Chlorine	tons	378,592	383,403
Formaldehyde (37% basis)	lbs.	125,740,417	110,367,043
Methanol, Synthetic	lbs.	161,105,808	167,992,318
Phthalic Anhydride	lbs.	32,951,951	30,612,206
Sodium Hydroxide (Caustic Soda 100% NaOH)	tons	406,530	406,473
Sulfuric Acid (100% H_2SO_4)	tons	1,353,924	1,336,027

Sources: Tariff Commission, Bureau of Census

International Opportunities

Business organizations, business concerns and businessmen should be most seriously interested in the new three-year masters program combining study in business administration and in international affairs which has been established at Columbia University. One year will be spent in the graduate school of business; the second in the school of international affairs. In the third year, courses will be taken from both schools.

Business is steadily becoming more and more an internatoinal affair. US business personnel lags more or less behind that in other major countries in recognition and consideration of that trend—and in keeping in step with it. Its concerns and its organizations would do very well and wisely to analyze the potentialities of the new Columbia program, with the objective of applying them, by way of scholarships, to the overcoming of the lag and to assure the attaining and maintaining by this country's business of leadership that will be fully in keeping with the political type, respect for which among the public of Western Europe is reported by impartial commentators to be "notably high."

In that direction, much that should be known can be learned from the objectives and activities in connection with the programs of the United Nations Educational, Scientific & Cultural Organization and to the International Council of Scientific Unions. The latter, whose general assembly met in London last week, has a very important union in the field of pure and applied chemistry.

Useful contacts at a more everyday level will be afforded at the world's fair scheduled to be held in New York in 1964, in which fifty-nine nations thus far have announced that they will participate.

Business as an international affair is a matter of meeting those with whom it is desired to have its relations, knowing them, and serving them—to the mutual satisfaction and advantage of all concerned.

Chemical Sales Outlook

Representatives of the marketing division of the chemical industry got two good earfuls of sales commentarying at the recent marketing conference of the National Industrial Conference Board. Those who were not at that conference can get the same thought-promoting stimuli through their eyes by reading in last week's OPD the reports on what was said there by sales officials of two important concerns in this country's industry.

It is to be expected that every member of every sales staff in that industry will jump to the reading of what is said on page 5 about the trend of sales and profits in 1962. It is sincerely to be hoped and earnestly urged that every one of them lose no time in getting seriously into the reading of what is said on page 4 about distribution as the "last frontier of industrial waste and inefficiency." And then all should most studiously reread both articles at least twice.

Optimism is a very desirable characteristic of the attitude of sales personnel. But, in good efficient practice, it must be adequately complemented with realism. Optimists, no doubt, will be ready to go right along with the predicting on page 5 that chemical sales will soar or climb next year. But, realists know that sales do not soar or climb—they have to be hoisted or boosted by appropriate application of efficient promotive policies, practices and procedures in all areas and at all levels in both mental and physical activity.

It is not only the physical functions of distribution that are all too often allocated among management and staffs without adequate consideration of or regard for the essentails of objective teamwork for efficiency. Planning is in many ways fully as important and as necessary as doing in selling as in all other business practices.

Business and Government

A promising move in the direction of better relations between US business and the US government was made quite recently when the Business Council and President Kennedy held a successful peace-making meeting in the White House. The council, it will be recalled, broke its volunteer advisory relations with the Department of Commerce about three months ago in protest against the Commerce Secretary's intention and attempts to subject it to the controls exercised with respect to the activities of governmental advisory groups.

It offered, however, to provide advisory services to any governmental agency desiring them. No request for such services was made in the interim. The members of the council began to feel that they were out of touch with much governmental policy and activity in which they had an interest and a worthy desire to be of service.

The administration was motivated in the direction of restoring closer relations with the council by its increasing desire at least to quiet rumors — even charges—that it is anti-business in various respects. Judging from his attitude toward the President's peace-making, the Secretary of Commerce has a serious share in his chief's concern over the anti-business talk that is alleged to be going around. What either of them will do as a consequence of the advice which will be proffered by the Business Council remains to be seen. It should be potentially good in both directions.

Meetings

American Coke & Coal Chemicals Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., October 23-24.

American Council of Independent Laboratories, annual meeting, Sheraton hotel, Philadelphia, October 10-14.

American Oil Chemists' Society, fall meeting, Pick-Congress hotel, Chicago, October 30-November 1.

Association of American Feed Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 26-28.

Association of Official Agricultural Chemists, annual meeting, Shoreham hotel, Washington, D. C., October 30-November 1.

Canadian Manufacturers of Chemical Specialties Association, annual meeting and conference, Royal York hotel, Toronto, Ont., October 30-November 1.

Chemical Buyers Group of National Association of Purchasing Agents, annual fall conference, Chase hotel, St. Louis, Mo., October 11.

Chemical Industries Exposition, Coliseum, New York, November 27-December 1.

Chemical Market Research Association, Mark Hopkins hotel, San Francisco, November 28-December 1.

Chemical Specialties Manufacturers Association, annual meeting, Roosevelt hotel, New York, December 4-6.

Commercial Chemical Development Association, fall meeting, Palmer House, Chicago, October 18-19.

Electrochemical Society, Statler Hilton hotel, Detroit, Mich., October 1-5.

Federation of Societies for Paint Technology, annual meeting, Shoreham and Sheraton-Park hotels, Washington, D. C., November 2-4.

Manufacturing Chemists' Association, semi-annual meeting and midyear conference, Commodore hotel, New York, November 21.

National Agricultural Chemicals Association, annual meeting, The Homestead, Hot Springs, Va., October 29-November 1.

National Association of Retail Druggists, annual meeting, Fontainebleau hotel, Miami Beach, Fla., October 1-5.

National Paint, Varnish & Lacquer Association, annual meeting, Statler-Hilton hotel, Washington, D. C., October 30-November 1.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 11-12.

Society of Chemical Industry, American section, chemical industry medal dinner, Waldorf-Astoria hotel, New York, October 13.

Society of the Plastics Industry, annual New England Section conference, Wentworth-by-the-Sea, Portsmouth, N. H., October 12-13.

Synthetic Organic Chemical Manufacturers Association, annual customs seminar, Roosevelt hotel, New York, October 9-10; monthly luncheon meeting, Roosevelt hotel, New York, October 10.

Toilet Goods Association, scientific section meeting, Waldorf-Astoria hotel, New York, November 29.

Washington Talks It Over

Hot Water Seems to Be What Mr. Ribicoff Is Wading Into When It Comes to Adminstration Of the New Water Pollution Control Law and the Emphasis It Will Carry.

By Ralph L. Cherry
Washington Editor

If plans being urged upon Secretary of Health, Education & Welfare Abraham Ribicoff for administration of the new water pollution control law are adopted, as now written, Mr. Ribicoff is going to find himself in hot water. He will be there with some members of congress who are influential on water pollution, as well as with the conservationists.

Chances are that the plans will undergo some material revisions as a result of this situation before they are finally approved and put into effect.

Shortly after passage of the new control law last July, Mr. Ribicoff assigned a small group in his department to the task of drawing up a blueprint for its administration.

The first thing they proposed was that Mr. Ribicoff designate either the undersecretary or one of the assistant secretaries to be in direct charge of the program.

This much met with the approval of the congressmen and the conservationists because it had the effect of elevating the program to the top drawer in the HEW set-up, which is one of the aims of the law's sponsors.

But then the group proposed that the operating program be reassigned to the Public Health Service, with little if any change in procedures or administration. On this point the plans of the task force have run into serious snags.

The congressmen and the conservationists do not object to PHS being named the enforcement agency, but they do object to the lack of emphasis given by the agency to the problem of water as a natural and diminishing resource.

They argue that pollution is no longer a matter primarily of public health—there haven't been any deaths from typhoid because of pollution of the streams and waterways for twenty-five years, is the way they explain their position.

The real problem today is adequacy of fresh water supplies and they want the law administered with that point always in view. They want the influence of the pathologists and other medical scientists subordinated to that of the regulators in the agency.

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, September 29 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

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Acetaldehyde, 99%, dms., c.l., frt. alld lb. .12 - —
dms., l.c.l., frt. alld ..... lb. .13½- —
tanks, frt. alld ..... lb. .10 - -
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Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls., bgs. ton lots, frt. alld, lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms. any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid comi. or redist., 28%, bbls 100 lbs 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs 9.95 - —
80%, bbls. ..... 100 lbs 10.45 - —
glacial, syn., CP, dms., c.l., divd. E 100 lbs. 18.75 - —
tech., dms., c.l., divd. E. 100 lbs. 13.75 - —
dms., l.c.l., divd. E ..100 lbs. 15.25 - —
tanks, divd. E ..... 100 lbs. 10.00 - —
USP, tanks, divd. E ...100 lbs. 13.00 - —
Acetic anhydride, aluminum ret. dms., c.l., divd. E lb. .16½- —
aluminum ret. dms., l.c.l., divd E. lb. .18 - —
tanks, divd. E. lb. .14 - —
Acetic anhydride prices 1c. higher in West.
Acetoacetanilide, fib dms., c.l., divd lb. .70 - —
fib. dms., l.c.l., divd ..... lb .71½- —
Acetoacet-o-chloroanilide, fib dms., c.l., divd lb. 1.25 - —
fib. dms., l.c.l., divd ..... lb. 1.26 - —
Acetoacet-o-toluidide fib dms., c.l., divd lb. .73 - —
fib. dms., l.c.l., divd ..... lb. .74½- —
Acetone, CP, dms., c.l., divd. lb. .69½- —
dms., l.c.l., divd ..... lb. .11 - —
tanks, divd. ..... lb. .07 - —
Acetonitrile, dms., c.l., frt. alld lb. .37½- —
dms., l.c.l., frt. alld ..... lb. .39 - —
tanks, frt. alld ..... lb .35 - —
Acetophenetidin, USP, powd., 200-lb. dms., 1.000 lbs., frt. alld lb. 1.20 - —
100-lb dms. 1.000 lbs. frt. alld. lb. 1.22 - —
Acetophenone, cns., dms ..... lb 42 1.30
Tech., dms., c.l., works ..... lb. .32½- —
dms., l.c.l., works ..... lb. .34 - —
tanks, works ..... lb. .30 - —
N-Acetyl-p aminophenol, dms., l.t. (min 23.000 lbs.), frt. adjusted lb. 1.30 - —
dms., 1.000-lb. lots, same basis lb. 1.40 - —
dms., 100-lb. lots, same basis ... lb. 1.54 - —
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .20 — —
cs., l.c.l., ex whse lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 —
Acetylsalicylic acid, USP, cryst (20, 40 mesh), powd. (80 mesh), 250-lb dms., c.l., pt. of shipt lb. .56¼- —
USP 10% starch granulation, 12-50 mesh, white, 250-lb. dms., c.l., same basis lb. .56¼- —
(Pink and green granulations 5c. per lb higher.)
Freight equald shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms. c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .36½- —
tanks frt. alld. E. of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 .55
Acrolein, tech., dms., c.l., works lb. .36 — —
dms., l.c.l., works ..... lb. .36¾ - —
tanks, works ..... lb. .31 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., divd lb. .42½- —
dms., l.c.l., l.t.l., divd lb. .43½- —
tanks, divd. ..... lb. .40 - —
tech., esterification, tanks, frt. alld lb. .38 - —
tech., polymerization, tanks, same basis lb. .38 - —

Abies Siberica Oil—Ammonium Biborate

Acrylonitrile, dms., c.l., t.l., works lb. .17½- —
dms., l.c.l., l.t.l., same basis .... lb. .18½- —
tanks, same basis ..... lb. .14½- —
Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., divd ..... lb. .29 - —
bgs., l.c.l., divd. ..... lb. .31¾- —
Agar, USP, Kobe No. 1, strip, bls. lb. 3.00 - 3.10
powd., 30 mesh., fib. dms lb. 2.40 - 2.60
dl-Alanine, dms., 100-lbs. or more, f.o.b works lb. 5.25 - —
dms. 1-99 lbs., same basis lb. 10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l. divd lb. .99 - —
fib. dms., l.c.l., divd lb. 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root bgs lb 1.50 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., divd. E. of Rockies lb. 2.45 - —
Alkali blue prices 1c. higher W. of Rockies.
Allethrin, 90%, dms., frt. alld lb. 28.80 - 28.90
Soln., 20%, dms., 200-2.000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms. frt. alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. divd. ..... lb. .32½- —
dms., l.c.l., divd. ..... lb. .34 - —
tanks, divd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5.005 lbs. or more, works lb. 1.50 - —
55-lb. cbys., 1,045 to 4.95 lbs. works lb. 1.53 - —
55-lb. cbys., 55 to 990 lbs works. lb. 1.60 - —
Allyl chloride, dms., c.l., divd. lb. .17½- —
dms., l.c.l., divd ..... lb. .19 - —
tanks, divd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif. bitter (see Benzaldehyde)
Almond oil, nat. bitter, f.p.a., bots. lb. 2.75 3.45
NF, bots. ..... lb. 3.00 3.30
sweet, USP, cns., dms ..... lb. .60 - .70
Aloe, Cape, ss. ..... lb. 35 - .40
powd. cs. ..... lb 60 - .65
Curacao, kgs. ..... lb. .75 - —
powd., kgs. ..... lb. .85 - —
Aloin, USP, bbls., dms., kgs ..... lb. 3.25 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., c.l., works ..100 lbs. 4.80 - —
Lump, dms., works ..... 100 lbs. 5.55 - —
Powd., dms., works ..... 100 lbs. 5.70 - —
Alum potassium, gran., bgs., c.l., works ..100 lbs. 5.05 - —
Lump, dms., works ..... 100 lbs. 5.80 - —
Powd., dms., works ..... 100 lbs. 5.95 - —
Alum, potash-chrome, dms ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .0535- —
bgs., l.c.l., works ..... lb. .056 - .0835
Aluminum acetate, basic, fib. dms., l.c.l., works lb. .54 - —
Aluminum chloride comi., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works lb. .16½- —
cryst., dms., c.l., works 100 lbs 21.00 - —
dms., l.c.l., works 100 lbs. 21.50 - —
Soln., 32° cbys., c.l., works lb. .0495- —
cbys., l.c.l., works lb. .0570- .1095
tanks, works 100 lbs. 3.95 - —
NF, gran. dms., works lb. .31 - .32
Aluminum fluoride tech., anhyd., bgs., c.l., works lb. .16¼- —
bgs., l.c.l., works lb. .17¼- .19¼
bulk, c.l. basis 80% lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs. 11.00 - —
containers extra, l.c.l., works. 100 lbs. 11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0370- —
bgs., 20.000-40.000 lb. lots, same basis lb. .0395- —
bgs., 2.000-20.000 lb. lots, same basis lb. .0495- —
bulk, c.l., same basis ..... lb. .0530- —
Light, bgs., c.l., t.l., works ..... lb. .03 - —
bgs., t.l., to c.l., works ..... lb. .09 - —
bgs., l.t.l., works ..... lb. .10 - —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
9-9½% Al_2O_3, fib. dms., works. lb. .19 - —
fib. dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb ingots, 10.000-lb. lots, frt. alld lb. .2810- —
50-lb. pigs, 10.000-lb. lots, frt alld. lb. .28 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .71 - —
Standard grade, dms ..... lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb. 1.13 - —
Standard grade, dms ..... lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb. for 100-lb. dm., 1½c per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1.499 lbs. 2c. for 1.500 to 4.999 lbs., 3c. for 5.000 to 29.999 lbs. and 4c. for 30.000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or more.
Aluminum resinate, precip., 2.1% Al, dms lb. .45 - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton. 41.00 - —
bulk, c.l., same basis ton. 40.00 - —
lump, bgs., c.l., same basis ton. 44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald, 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works ..... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 - 10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.15 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld. lb. 2.15 - 3.85
p-Aminodiphenylamine, tech., solid, dms., frt. alld. lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., divd lb. .475 - —
dms., l.c.l., divd ..... lb. .49 - —
tanks, divd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld. lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots, lb. 2.05 - —
dms., smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.25 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald, E. of Rockies ..ton. 84.00 - —
refrigeration, tanks, works, frt. equald, E. of Rockies ton. 94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies, ton. 87.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l. works, frt. equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 - 12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb. lots, works. lb. 1.90 - —
Ammonium biborate, gran., dms., c.l., works ton. 325 - —
dms., ton lots, ex whse. 100 lbs. 22.86 - —
dms., smaller lots, ex whse. 100 lbs. 24.11 - —

Abbreviations

Used in OPD Market Quotations

alld.	allowed
amorph.	amorphous
AMP	American melting point
anhyd.	anhydrous
AOAC	Association of Official Agricultural Chemists
a.p.a.	available phosphoric acid
approx.	approximately
artif	artificial
ASTM	American Society for Testing Materials
Atl.	Atlantic
Be.	Baume
bbls.	barrels
bgs.	bags
bls.	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C.	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystalline
cs	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist.	destructively—distilled
dl-	dextro-laevo
dist.	distilled
distr.	distributor
djns.	demijohns
dlvd.	delivered
dms.	drums
dom.	domestic
E.	east
e.p.	end point
equald.	equalized
exp.	expressed
Ext.	external
F.	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
i.&a.	iron and aluminum
i.b.p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less carlots
l.t.l.	less truckload
liq.	liquid
mfrs.	manufacturers
m-	meta
m.a.p.	mixed aniline point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
powd.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S E.	southeast
sec.	secondary
secs.	seconds
s.g.	specific gravity
shipt.	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
t.l.	truckloads
t.w.	tankwagons
USP	U. S. Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w.w.	water-white

A unit-ton is 2.000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2.000 pounds of the material.

Ammonium bicarbonate, dom., dms., c.l., works	100 lbs.	7.50	—
dms., l.c.l., works	100 lbs.	9.50	—
Ammonium bichromate, dms., works	lb.	.42	.43
Ammonium bifluoride, dms., dlvd	lb.	.2145	.2245
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald	lb.	.44	—
dms., l.c.l., same basis	lb.	.46	—
Ammonium carbonate, USP, lump, dms., c.l.	lb.	.15½	—
Ammonium chloride, white, tech., fine gran., bgs., c.l., works	100 lbs.	6.00	—
bgs., l.c.l., works	100 lbs.	8.00	8.45
USP, gran., 250-lb. dm.	lb.	.20	—
Ammonium citrate, dibasic, 250-lb. dm, f.o.b. works	lb.	.77	—
Ammonium dichromate (see Ammonium bichromate)			
Ammonium fluoride (see Ammonium bifluoride)			
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E	lb.	.45	—
Ammonium hydroxide (see Ammonia aqeous).			
Ammonium iodide, NF, 25-lb. jar, f.o.b. works	lb.	4.51	—
Ammonium lauryl sulfate, dms., c.l., frt. alld	lb.	.20½	—
dms., t.t.l., frt. alld	lb	.21½	—
tanks, frt. alld	lb.	.19½	—
Ammonium lignin sulfonate, bgs., bgs, l.c.l., works	100 lbs.	3.75	4.25
bgs., t.c.l., works	100 lbs.	3.40	3.65
Ammonium linoleate, 80%, dms., works	lb.	.50	.55
Ammonium molybdate, CP, cryst., 400 lb dms., 15,000-lbs. works.	lb.	1.35	—
400-lb dms., 2,000-lb. contracts, work	lb.	1.36	—
400-lb dms. works	lb.	1.37	—
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., f.o.b. works	ton.	64.00	—
dom., with dolomite, 20.5% N, bgs., c.l., Hopewell, Va.	ton.	44.00	—
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price	ton.	64.00	—
Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b works E	lb.	.28½	—
Tech., powd., 200-lb. dm., same basis	lb.	.28½	—
Ammonium pentaborate, gran., bgs., c.l., works	ton.	193.00	—
bgs., ton lots, ex whse	100 lbs.	15.27	—
bgs., smaller lots, ex whse	100 lbs.	16.52	18.52
Ammonium pentaborate powder $10 per ton higher in bags.			
Ammonium persulfate, tech., dms., 10-ton lots or more, works	lb.	.18	—
dms., smaller lots, works	lb.	.20	.23
Ammonium phosphate, comi., bgs., c.l., works, frt. equald	lb.	.09¼	—
bgs., l.c.l., same basis	lb.	.10	—
Ammonium phosphate, dibasic, NF., V, bbls., dms	lb.	.46	—
Dibasic, tech., bgs., c.l., works, frt. alld	lb.	.09¼	—
Ammonium silicofluoride, dms., works	lb.	.12¼	.13¼
Ammonium sulfamate, bgs., c.l., t.l., works	lb.	.19	—
bgs., l.c.l., works	lb.	.20½	.27
Ammonium sulfate, standard granular, bulk, f.o.b works, base price	ton.	32.00	—
Purif., c.l., 100-lb. bgs., f.o.b. works	lb.	.08½	—
Ammonium sulfate, large granular, bulk, c.l., works	ton.	35.00	—
bgs., c.l., works	ton	40.00	—
Tech., bulk, c.l., t.l., works	ton	52.00	—
bgs., c.l., t.l., works	ton	56.00	—
bgs., l.c.l., t.t.l. works 100 lbs.	ton.	3.20	5.20
Ammonium sulfide, liq., 40-44%, tanks, frt equaid., 100% basis.	ton.	160.00	—
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate)			
Ammonium thiocyanate, tech., cryst. dms., c.l., works	lb.	.20	—
dms. l.c.l., works	lb.	.22	.26
Tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content	lb.	.17¼	—
Ammonium thioglycolate, comi., 55-gal. dms., ton lots, 100% basis	lb	1.15	—
d-Amphetamine hydrochloride, monobasic, dms	lb.	17.50	23.50
dl-Amphetamine hydrochloride, dibasic dms	lb.	4.50	6.00
d-Amphetamine phosphate, fib dms., 100-lb. lots	lb.	15.00	—
dl-Amphetamine phosphate, dms.	lb.	4.20	5.60
d-Amphetamine sulfate, fib. dms.	lb.	15.00	17.00
dl-Amphetamine sulfate, fib. dms.,	lb.	4.20	5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt alld. E of Rockies	lb.	.18½	.19
dms., t.c.l., same basis	lb.	.20	.20½
tanks, same basis	lb.	.16	.16½
Amyl acetate, ex pentane, reg., dms., c.l., dlvd.	lb.	.19	—
dms., c.l., dlvd.	lb	.21½	—
tanks, dlvd.	lb	.16½	—
Tech., dms., c.l., dlvd	lb.	.17	—
dms., l.c.l., dlvd	lb	.18½	—
tanks, dlvd	lb	.14½	—
Syn., oxo process, dms., c.l., dlvd.	lb.	.19	—
dms., c.l., dlvd.	lb	.20½	—
tanks, dlvd	lb	.16½	—
Amyl alcohol, ex fusel oil (see Fusel oil refd).			
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd	lb.	.43½	—
refd., ACS grade, dms., l.c.l., dlvd	lb.	.45½	—
ex pentane, mixed amyls, dms., c.l., frt. alld	lb.	.19	—
dms., l.c.l. frt. alld	lb.	.20½	—
tanks, frt. alld.	lb.	.16½	—
Primary, dms., c.l., frt. alld	lb.	.20¼	—
dms., l.c.l., frt. alld	lb.	.21¾	—
tanks, frt. alld	lb.	.17¾	—
Sec-synthetic, dms., c.l., works, frt. alld	lb.	.19	—
dms., l.c.l., same basis	lb.	.20½	—
tanks, same basis	lb.	.17	—
Tert-synthetic, dms., c.l., frt. alld. E	lb.	.17	—
dms., l.c.l., frt. alld. E.	lb.	.18½	—
tanks, frt. alld. E.	lb.	.14½	—
1-pentanol (syn. normal), dms., c.l., works	lb.	.41½	—
dms., l.c.l., works	lb.	.43	—
tanks, works	lb.	.39½	—

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dioctyl phthalate (DOP)
dioctyl isophthalate (DOIP)
polymeric plasticizer NP-10

For properties and shipping information on these and other Eastman products, see **Chemical Materials Catalog, page 363, or Chemical Week Buyers' Guide, page 107.**

Repeat performance

One of our regional sales managers relates the following:

"It was one of those ten of five Friday afternoon phone calls, so you might say I answered...well, guardedly,

"But it turned out to be a customer calling to say thanks for a service we had performed on the previous weekend. His acetone recovery unit had gone "sour," and he had called at about the same time a week past to ask if there was any possible way we could deliver 4,000 gallons of acetone before 8 o'clock Monday morning.

"To make a long story short, we did deliver. Of course it involved extra-schedule crews to clean and load a tank truck on Saturday morning, not to mention late Friday hours for some of the people in our order writing and traffic departments. But, as the customer pointed out while extolling our service at length and my part in it, our extra effort sure saved the day for them by keeping their process going.

"I was just beginning to get a smug, self-satisfied feeling when the customer said: 'Bob, you're not going to believe this, but...'

"He didn't have to say another word. The only thing that worried me was what to say to our production people after repeating to them: You're not going to believe this, but...

"Well all I *could* say was: Can you do it again? And they did. Same customer, same place, before 8 o'clock on Monday morning."

We sincerely hope that this *lightning-strikes-in-the-same-place-twice* situation never happens in your process operations.

But if it does, and you need service fast, give us a call.

Eastman CHEMICAL PRODUCTS, INC., KINGSPORT, TENNESSEE, Subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Boston; Buffalo; Chicago; Cincinnati; Cleveland; Detroit; Greensboro, North Carolina; Houston; Kansas City, Missouri; New York City; Philadelphia; St. Louis.
Western Sales Representative: Wilson & Geo. Meyer & Company, San Francisco, Los Angeles, Salt Lake City, Seattle.

Amyl Alcohol—Cadmium Selenide Lithopone Red

Amyl alcohol, 2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb .60 - —
Amyl n-butyrate dms. lb 1.00 - 1.25
Amyl cinnamic aldehyde dms lb 1.70 - 2.20
p-tert Amyl phenol dms. c.l., works. lb. .28 - —
dms., l.c.l., works lb. .29 - —
Amyl salicylate, cns. dms. lb .71 - —
Amyris oil, dms. lb. 1.40 - 1.50
Anethol tech., dms. lb .80 - .92
USP cns. dms lb 1.05 - —
Angelica root, bls lb. .50 - 1.00
Angelica root oil, bots lb 120.00 - 140.00
Angelica seed oil, bots lb 120.00 - 130.00
Aniline, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
Aniline oil (see Aniline).
Aniline salt dms. c.l. t.l., 20,000 lbs min., frt alld lb. .33 - —
dms., l.c.l., same basis lb .35 - —
Anise oil, USP, dms lb. 1.90 - 3.00
Anise seed, Turkish, bgs lb. .24 - —
Spanish, bgs. lb. .34 - —
Anisic aldehyde, dms lb 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b. works lb. .42½ - —
dms. l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99% 150-lb. dms., dlvd lb 1.15 - —
Anthraquinone, 99.5% bgs., c.l., frt alld lb. .70 - —
bbls., l.c.l., same basis lb. .73 - —
Electrical grade, bgs. l.c.l., same basis lb 1.10 —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .32½ - —
cs., c.l., mines lb. .33 - —
Antimony oxide, bgs., c.l., frt. alld. lb. .30 - —
bgs., l.c.l., frt. alld lb .31½ - —
Prices of antimony oxide are 2c. higher west of the Rockies.
Antimony sulfide, approx 65%, bgs., 10,000-lb. lots, dlvd lb. .23 —
bgs., smaller lots, dlvd lb. .24 .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .44½ - —
pails, l.c.l., works lb. .46½ - —
Antimony-potassium tartrate, tech., powd., 250-lb. dm., f.o.b. works, E lb. .69½ - —
USP, powd., 250-lb dm., same basis lb. 74½ - —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz. 35.60 - —
Apricot kernel oil, USP, dms lb. .55 - .70
Arabic gum, amber sorts, 10 bgs. lb. .21 - .23
USP, powd., bbls lb. .27 - .30
Areca nuts, powd., bbls lb. .18 - .20
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
1-Arginine free base, dms., 10-kilo 5-kilo lots or more kilo. 60.00 - —
1-Arginine glutamate dms., 10-kilo lots or more kilo. 64.80 - —
1-Arginine monohydrochloride, dms., 5-kilo lots or more kilo. 60.00 - —
Arnica flowers (true Montana), bls. lb .75 —
Aromatic petroleum solvents (see Solvent Naphtha petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, NF, powd., dms., 300-lb., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½ - —
bbls., l.c.l. works lb .06½ - .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb 75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton 86 00 - —
7D, c.l. (30 tons), mines ton 75 00 - —
7F, c.l. (30 tons), mines ton 71 00 - —
7H, c.l. (30 tons), mines, ton 61 00 - —
7K, c.l. (30 tons), mines ton 50.00 - —
7M, c.l. (30 tons), mines ton 44.00 - —
7R, c.l. (30 tons), mines ton 43.00 - —
7RF c.l (30 tons), mines ton 44.00 - —
7T, c.l. (30 tons), mines ton 41 00 - —
7TF, c.l. (30 tons) mines ton 44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher
Ascorbic acid, USP dms. 100-kilos kilo. 5.60 - —
dms., less than 100-kilos kilo. 5.85 - —
Ash black (see Barium sulfide)
Asphalt, gilsonite, black jet, bgs., c.l., mines ton 43.00 - —
ex-whse, 5 tons or more, N. Y., N. J ton 89.50 - —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines ton 46.00 - —
270°-295°F fusing pt., bgs., c.l., mines ton 43.00 - —
Petroleum, cut-back, tanks, tank-wagon, refy gal. .09½ - —
emulsion, tanks, tankwagon refy gal. 09½ - —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton 21 00 - —
85-100 penetration, tanks, tank-wagon, refy ton 20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins oz. Nom.
Atropine sulfate, USP, bots, 10 oz. lots oz. 5.25 - —
Azelaic acid, bgs., c.l., dlvd lb. .37 - —
bgs., ton lots, same basis lb. .36 - —

B

Bacitracin, sterile, over 500,000,000 units, 50,000 units .90 - —
non-sterile, over 500,000,000 units, 5,000 units .6[illegible] - —
Balm of Gilead buds, dried bgs lb 1.25 1.35
Barberry root bark, bgs lb 1.00 1.10
Barbital, NF 100-lb dms. f.o.b. works lb 4.50 —
Barbital sodium, NF 100-lb dms. lb 4.75 - —
Barium carbonate precip., bgs. c.l., works ton 111.50 - —
bgs. smaller lots, works ton 126.50 - —
Barium chlorate, dms. works lb .32 .41
Barium chloride anhyd, bgs. c.l., works ton 176.00 - —
bgs., l.c.l., works ton 196.00 - —
NF, cryst., dms., 400-lbs., works lb .23 - —
Tech., cryst., bgs. c.l. works, 100 lbs 7.00 - —
bgs., l.c.l., works 100 lbs 8.00 - —
Barium chromate, bgs., frt. equald, lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton 206.00 - —
bgs., l.c.l., t.l., frt equald ton 218 00 - —
Barium monohydrate, 99%, bgs., c.l., frt equald 100 lbs. 11.25 - —
bgs. l.c.l., frt equald 100 lbs. 11.75 - —
Barium monoxide (see Barium oxide)
Barium nitrate, bbls. c.l., t.l., dlvd lb. .16 - —
bbls., l.c.l., t.l., dlvd. lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt equald ton 275 00 - —
dms. l.c.l., t.l. frt equald ton 285 00 - —
Barium peroxide, dms. frt equald, lb .20 —
Barium stearate, ctns c.l. frt alld. lb .41 —
ctns., l.c.l. same basis lb. .42 .46
Barium sulfate, tech (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb dm. lb. .19 - —
Barium sulfide, dms. c.l. works, ton 100.00 —
dms., l.c.l., works ton 110 00 —
Barytes, southern off-color, bgs. mines ton 31.00 - —
95-75% bgs., mines ton 30 00 - —
white, water-grd paper bgs. c.l. St. Louis ton 60.00 - 60.25
paper bgs. ex whse New York ton 84.85 —
Battery acid, cbys. c.l. works E. 100 lbs 2.35 —
cbys, l.c.l., works, E 100 lbs 2.65 - 10.95
Bauxite, bulk, mines ton 7.00 - 10.00
Bay oil, NF Puerto Rican 50-55% cns lb. 3.75 - —
NF, Dominica, 50-55%, cns., dms lb. 3.60 - 4.50
Bayberry wax, bgs lb. .65 70
Beeswax, crude, African, bgs. lb. .53 - .54
Brazilian, bgs. lb. .56 - .57
Central American, bgs. lb. .55 - .56
Chilean, bgs. lb. .57 Nom.
Refd. USP bleached white, bricks 100-lb ctns lb. .67 - .69
white, slabs, 100-lb ctns lb. .66 - .68
yellow, bricks, 100-lb. ctns lb. .60 - .62
yellow, slabs, 100-lb. ctns lb. .59 - .61
Belladonna leaf, bls lb. .25 - .30
Belladonna root, bls lb. .35 - .38
Bentonite, dom 200 mesh, bgs. c.l., mines ton 14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton 95.20 - —
bgs., 1-ton lots, ex whse ton 99 00 - —
Imp. Italian, white, tow gel., bgs., 5-ton lots, ex whse ton 93.40 - —
bgs. 1-ton lots ex whse ton 97 16 - —
Benzal chloride chys., works lb. .44 - —
Benzaldehyde, NF, dms lb. .74 - —
Tech., dms., c.l., t.l. lb. .42 - —
dms., l.c.l lb. .44 - —
Benzene, industrial or nitration, tanks, works:
Baton Rouge, La. gal. .31 - —
Bethlehem, Pa. gal. .31 - —
Birmingham district gal. .31 - —
Chicago district gal. .31 - —
Cleveland district gal. .31 - —
Geneva, Utah gal. .31 - —
Houston, Tex. gal. .31 - —
Johnstown, Pa. gal. .31 - —
Lackawanna, N. Y. gal. .31 - —
Lone Star, Tex. gal. .31 - —
Lorain, Ohio gal. .31 - —
Mennequa, Colo. gal. .31 - —
Middletown, Ohio gal. .31 - —
Philadelphia district gal. .31 - —
Pittsburgh district gal. .31 - —
Port Arthur, Tex. gal. .31 - —
St. Louis, Mo. District gal. .31 - —
Sparrows Point, Md. gal. .31 - —
Syracuse, N. Y. gal. .31 - —
Terre Haute, Ind. gal. .31 - —
Youngstown, Ohio gal. .31 - —
Benzene hexachloride 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit, .0075 —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065 —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit, .0075 —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056 —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 - —
AAOT, bbls., dlvd. lb. 2.55 - —
Lightfast, bbls. dlvd. lb. 3.40 - —
Benzocaine, dms 100-lbs., frt alld. lb. 3.25 - —
Benzoic acid, tech. dms., c.l., t.l., frt. alld lb. .25 - .37
dms., l.t.l., same basis lb. .29 - .41
tanks, same basis lb. .21 - —
USP, bbls., dms., ton lots lb. 48 - —
bbls., dms., 1,000-lb lots lb. .50 —

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra cs. lb. .32 —
Benzophenone, dms lb 1.35 1.45
Benzotriazole, tech dms. 1,000-lb lots, works lb. 1.95 - —
Benzotrichloride, cbys. 1,000-lb lots or more, frt equald. lb .21 - —
cbys., smaller lots frt. equald lb. .23 - —
Benzoyl chloride, cbys. dms. c.l., works, frt. equald lb. .22 - —
cbys., l.c.l., same basis lb .23 - —
tanktrucks, dlvd Metropolitan area lb. .21 - —
Benzoyl peroxide, purif. fib. dms., 50 to 1,000-lb lots works lb .98 1.08
Benzyl acetate, t.f.c. cns. dms lb. .54 —
Benzyl alcohol, NF, dms lb. .54 - —
Tech dms dlvd lb 47½ - .65
Benzyl benzoate, USP 40-lb dms. lb. .63 - —
Benzyl chloride, tech., dms., c.l., f.o.b. frt. equald lb. .23 - —
dms., l.c.l., same basis lb .24 - —
tanktrucks, dlvd., Metropolitan area lb. .21 —
Benzyl cinnamate, cns lb. 3.80 4.00
N-Benzyl-N,N-dimethylamine, 50 dms. frt. alld lb. 1.25 - —
12-49 dms. same basis lb. 1.35 - —
1-11 dms., same basis lb. 1.90 - —
Benzyl formate, cns. lb. 1.70 - 1.85
Benzyl isoeugenol, cns lb 8.20 - 8.30
Benzyl propionate, bots lb. 1.30 - 1.35
Benzyl salicylate, bots lb. 1.50 - 1.85
Benzylidine acetone, bots lb. 1.65 - 1.75
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns lb 56.50 - —
Berberine hydrochloride, bots. lb 56.50 - —
Bergamot oil, nat., NF Italian, cns. lb. 11.00 - 12.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene).
Betanaphthol (see b-Naphtol).
Betanaphthylamine (see b-Naphtholamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin cryst., bots gram 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns. lb. 1.50 - 1.90
Rectified, cns. lb. 1.75 - 2.00
Bismuth chloride oxi lars lb 5.11 —
Bismuth hydroxide dms lb 4.60 4.65
Bismuth metal, bxs. ton lots lb 2.25 - —
Bismuth nitrate, cryst., 200-lb. dm. lb. 2.25 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb 4.92 - —
Bismuth subcarbonate, USP, 25-lb. dm., f.o.b., works lb. 3.70 - —
Bismuth subgallate NF 200-lb dm f.o.b works lb 3.93 - —
Bismuth subiodide, lib dms lb 5.37 - —
Bismuth subnitrate, NF, 200-lb dm., f.o.b., works lb. 3.10 - —
Bismuth subsalicylate USP, 100-lb. dm., f.o.b works lb. 4.15 - —
Bismuth trioxide, 100-lb. dms., f.o.b works lb. 4.40 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A bgs., c.l., t.l., single shipt. 70,000-lbs or more, frt. alld lb. .30½ - —
bgs., c.l., t.l., less than 70,000-lbs., same basis lb. .31 - —
bgs., l.c.l., same basis lb. .32½ - —
Blackberry root bark, bls lb. .50 .55

BLACK PIGMENTS

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton 180.00 - —
bgs., l.c.l., works ton 170.00 - —
bgs., l.c.l., New York whse ton 215.00 - —
Blood, dried 16-16½% ammonia, bgs., New York unit-ton 5.50 - —
Bloodroot, bls. lb. .80 - .85

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms. lb. 1.90 - —
Peruvian, dms. lb. 1.65 - —
BON acid maroons, pure, bbls lb. 1.75 - —
Resinated bbls lb. 1.50 - —
Bonemeal, steamed, works, E ton 100.00 - —
Bone black, dms. c.l., frt. alld lb. .1750-.2225
l.c.l., works lb. .1950-.2425
Pacific coast bone black prices 3¼c. per lb higher
Bone phosphate defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip (see Calcium phosphate, tribasic)
Borax, tech., anhyd., 99½%, bgs., c.l., works ton 92.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 7.67 - —
bgs., smaller lots, same basis, 100 lbs. 8.91 -10.91
bulk c.l. works ton 83.00 —
Tech., gran., decanydrate, 99½%, bgs., c.l., works ton 50.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 5.31 - —
bgs. smaller lots same basis 100 lbs. 6.56 - 8.56
bulk c.l. works ton 43.50 —
Tech., pentahydrate, 99½%, bgs., c.l., works ton 84.50 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 6.12 - —
bgs. smaller lots, same basis 100 lbs. 7.37 - 9.37
bulk, c.l., works ton 58.00 —
USP powd., bgs. c.l., works. ton 54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.57 - —
bgs., smaller lots, same basis 100 lbs. 7.82 - 9.82
Bordeaux powder, trihasic bgs., c.l., dlvd lb. .24 - —
bgs. l.c.l. same basis lb. .26 - —
Boric acid, tech. anhyd. 99.9% bgs., c.l., works ton 335.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 21.27 - —
Tech, anhyd., 99%, bgs., smaller lots, same basis 100 lbs. 22.52 -24.52
cryst. 99.9% bgs. c.l. works. ton 163.50 - —
Tech., cryst., 99.9%, bgs., ton lots, ex whse., New York or Chicago 100 lbs. 11.67 - —
bgs. smaller lots same basis. 100 lbs. 12.92 -14.92
Boric acid, tech., cryst., 99.9%, dms. c.l., works ton 188.50 —
dms., ton lots, ex whse., New York or Chicago 100 lbs. 13.17 - —
dms., smaller lots, same basis 100 lbs. 14.42 - —
gran., 99.9%, bgs., c.l., works. ton 112.00 - —
bgs. ton lots ex whse. New York or Chicago 100 lbs. 8.78 - —
bgs. smaller lots same basis 100 lbs. 10.03 -12.03
dms. c.l. works ton 137 00 —
dms., ton lots, ex whse, New York or Chicago 100 lbs. 10.29 - —
dms. smaller lots same basis 100 lbs. 11.54 - —
bulk c.l. works ton 106.00 - —
powd., bgs., ton lots, ex whse, New York or Chicago 100 lbs. 9.20 - —
bgs., smaller lots, same basis 100 lbs. 10.45 -12.45
dms., ton lots, ex whse., New York or Chicago 100 lbs. 10.71 - —
dms., smaller lots, same basis 100 lbs. 11.96 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 - —
100-lb cyls. works lb. 1.70 - —
Boron trifluoride, gas, cyls., t.l., works lb. .70 - —
cyls., l.t.l. works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .33 - —
cs., l.c.l., same basis lb. .34 - .36
ref. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ref. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½ - —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 5-gal. cby., frt. equald lb. 1.93 - —
Bromstyrol, bots lb 5.25 - 5.35
Brucine, cns. oz. 1.10 - —
Brucine sulfate, NF, cns. oz. .85 - —
Buchu leaves, bbls lb. .60 - .65

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd cyls., c.l., refy lb .21 - —
cyls., l.c.l., refy lb. .22 - —
tanks, dlvd lb. .12¾ - —
Butene-1 tanks, works lb. .0625 - —
Butene-2, tanks, works lb. .0570 - —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
sec-Butyl acetate, syn. dms., c.l., dlvd. E lb. .14¾ - —
dms., l.c.l., same basis lb. .16¼ - —
tanks, same basis lb. .12¼ - —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E lb. .37½ - —
dms., l.t.l., same basis lb. .38½ - —
tanks, same basis lb. .35 - —
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .18 - —
dms., l.c.l. frt. alld lb. .19½ - —
tanks, frt. alld lb. .15½ - —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., frt. alld lb. .19½ - —
tanks, frt. alld lb. .15½ - —
Sec-synthetic, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. lb. .16½ - —
tanks, dlvd lb. .12½ - —
Tert-synthetic, dms., c.l., frt. alld., dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .13½ - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½ - —
dms., l.c.l., works lb. .38¼ - —
n-Butyl ether, dms., c.l., works lb. .35¼ - —
dms., l.c.l., works lb. .36 - —
tanks, works lb. .33¼ - —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½ - —
dms., l.c.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½ - —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms. l.c.l., works lb. .55½ - —
Butyl oleate, dms., c.l., frt. alld. lb. .26 - —
dms., l.c.l., frt. alld lb. .26½ - .27
Butyl phenylacetate, dms lb 4.50 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, CP, dms., c.l., frt. alld. E. of Rockies lb. .28½ - —
dms., l.c.l., frt. alld. E. of Rockies lb. .29 - .29¾
tech., dms., c.l., same basis lb. .25¾ - —
dms., l.c.l., same basis lb. .26¼ - .26¾
Butylamine (see Mono-, Di- and Tri-butylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. .47 - —
dms., l.c.l., same basis lb. .47½ - —
tc., t.t., same basis lb. .45 - —
Butylated hydroxyanisole, food grade, dms., dlvd lb 4.75 - —
6-tert-Butyl m cresol (see Mono-tert-butyl m cresol)
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p cresol).
1,3 Butylene glycol, dms. c.l., t.l., dlvd lb. .20½ - —
dms., l.c.l., t.t.l., f.o.b. works lb. .22 - —
tanks dlvd lb. .18 - —
p-tert-Butylphenol, bgs., c.l., frt. alld lb. .25½ - —
bgs., l.c.l., same basis lb. .26½ - —
tanks, same basis lb. .23½ - —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. lb. .23½ - —
tanks, dlvd lb. .19½ - —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works. lb. .40 - —
dms. l.c.l., same basis lb. .43 - —
n-Butyronitrile, dms., c.l., dlvd lb. .56½ - —
dms., l.c.l., dlvd. lb. .57½ - —
tanks, dlvd. lb. .54 - —

C

Cacao butter (see Cocoa butter)
Cadmium CP red, dark shade, bbls., frt alld E of Rockies lb 5.55 - —
Light shade, bbls., same basis lb 4.65 - —
Medium shade, bbls., same basis, lb. 5.30 - —
Medium, light shade, bbls., same basis, lb. 4.90 - —
Orange-red shade, bbls., same basis lb 4.30 - —
Yellow, all shades, bbls., frt. alld E. of Rockies lb. 3.02 - —
Cadmium chloride, 400-lb dms., f.o.b. shipping point lb. 1.56½ - —
Cadmium iodide, 25-lb fib dms lb 6.75 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd lb. 1.60 - —
Cadmium nitrate, purif cryst. 400-lb. dms., less than 5,000 lbs., f.o.b shipping point, lb. .94 - —
400-lb. dms., 5,000 lbs. or more, same basis lb. .90 - —
Cadmium-mercury lithopone orange, deep shade, bbls. frt alld E. of Rockies lb. 1.73 - —
Cadmium-mercury lithopone red, dark shade, bbls, same Basis lb. 2.03 - —
Red, light shade, bbls., same basis lb. 1.80 - —
Red, medium shade, bbls., same basis lb. 1.95 - —
Red, medium light shade, bbls same basis lb. 1.88 - —
Red, maroon shade, bbls same basis lb. 2.11 - —
Cadmium selenide lithopone maroon, bbls., frt. alld E. of Rockies lb. 2.84 - —
Orange, bbls., same basis lb. 1.66 - —
Cadmium selenide lithopone red, orange-red shade, bbls. same basis lb. 1.80 - —
Red, dark shade, bbls., same basis lb. 2.64 - —
Red, light shade, bbls., same basis lb. 1.96 - —
Red, medium shade, bbls., same basis lb. 2.31 - —
Red, medium-light shade, bbls. same basis lb. 2.08 - —

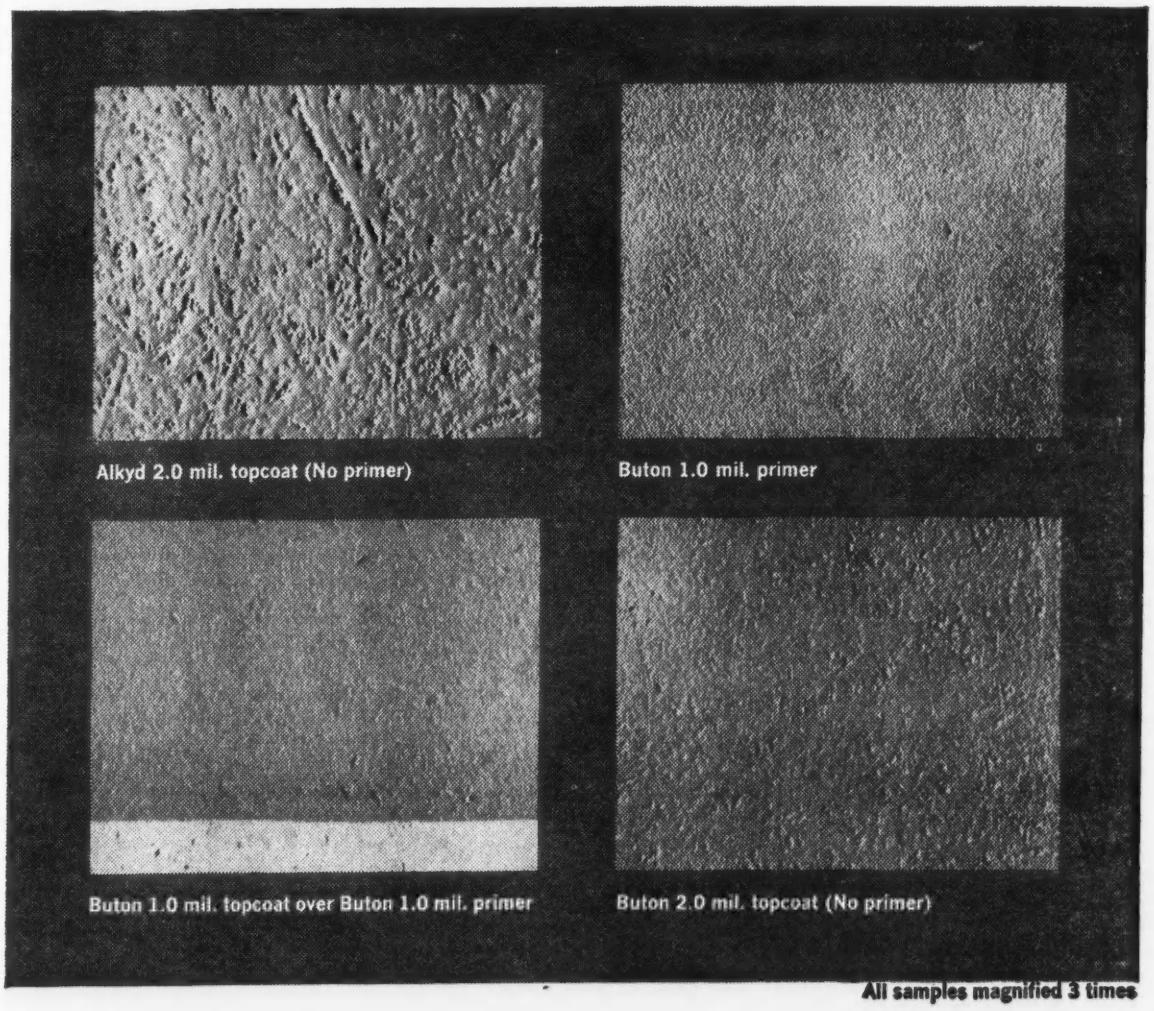
Cadmium-selenide, lithopone, yellow, all shades bbls., frt alld. E. of Rockies..lb. 1.27 • —
Caffeine, NF, citrated, dms., 100-lb. lots or more lb 2.70 • —
USP, syn., cryst., hydrous, dms., 100-lb. lots or more, frt. alld..lb. 2.25 • —
hydrous, powd., 150-lb. dms., frt. alld. lb. 2.25 • —
USP, syn., cryst., anhyd., powd., dms., 100-lb. lots or more, frt. alld..lb. 2.40 • —
Cajuput oil, native, cns. .....lb. 1.75 2.00
Redist., USP cns .....lb 1.90 2.10
Calamine, USP, dms. .....lb. .34 —
Calamus oil bots. .....lb.12.00 -20.00
Calciferol, cryst., 10-kilo or more lots, works gram. .54 • —
1-10 kilo lots .....gram. .55 • —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate fib. dms., 100 lbs. or more frt. adjusted lb 3.10 • —
Calcium bromide, NF, jars, 100 lbs. or more lb. 1.10 • —
Calcium carbide, standard generator size, 600-lb dms., c.l., dlvd ton.149.00 • —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 • —
Chalk, whiting, 325 mesh, bgs., c.l., works ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
Precip., dense, bgs., c.l., works, ton.30.00 -38.50
bgs., t.c.l., works ton.45.00 -53.50
medium, bgs., c.l., works ton.38.00 —
bgs., t.c.l. works ton.48.00 -53.00
Surface treated, bgs., c.l., works, ton.42.00 -44.00
bgs., t.c.l., works ton.57.00 -59.00
ultrafine, bgs., c.l., works ton.117.50 167.50
bgs., t.c.l., works ton.137.50 -187.50
Calcium chloride, conc., flake or pellet 94-97%, paper bgs., c.l. works, frt equald ton.39.30 • —
Flake, 77-80%, paper bgs., c.l., works, frt. equald ton.32.00 • —
Liquor, 40% tanks, frt equald. ton.12.50 • —
Powd., 77% min., paper bgs., c.l., works, frt. equald..ton.38.00 • —
Purit., gran., dms .....lb. .27 —
Solid, 73-75%, dms., c.l., frt. equald ton.30.50 • —
dms., t.c.l. works frt. equald, ton.36.00 -73.00
USP, gran., dms. .....lb. .32 • —
Calcium chromate, bgs., dlvd lb. .37 • —
Calcium cyclamate, 100-lb. dms lb. 1.95 • —
Calcium gluconate, USP, AA grade, 100-lb. dm., ton lb. .73½- —
USP, powd. 100-lb. dm., ton .lb. .66½- —
Calcium hydride, lump, dms. works, lb. 2.20 - 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd. E. of Rockies..cs.27.50 • —
100-lb. dms., same basis ...dm.39.50 • —
Calcium hypophosphite, dms., 1,000-lb. lots lb. 1.28 • —
Calcium iodide, 25-lb. jars, works, lb. 4.27 • —
Calcium lactate, NF, dms., f.o.b. works lb. .43 • .46
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 • —
Calcium naphthenate, liq., 4% Ca., dms., frt equald. lb. .30 • —
Calcium pantothenate, USP, 1 kilo or more..kilo.20.00 • —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms....lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, dihydrate, bgs., c.l., frt. equald 100 lbs. 8.25 • —
Feed grade, 18½% P, bgs., c.l., t.l., Bonnie, Fla., frt. equald ton.81.00 • —
bgs. c.l., t.l., f.o.b. Texas City works ton 75.50 • —
Feed grade, 21% P., bgs., c.l., t.l., frt. equald ton.97.65 • —
bgs., t.c.l. frt. equald ton.107.65 • —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l., prices.
Monobasic, bgs., 10,000-lb. lots, frt. equald..100 lbs. 7.45 • —
bgs., smaller lots, same basis, 100 lbs. 7.95 • —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 • —
bgs., t.c.l., frt. equald. 100 lbs.10.00 • —
Calcium propionate, any quantity, dms., dlvd. E. of Rockies, lb. .34¼- —
Prices W. of Rockies 3c. per lb. more.
Calcium phytate, bgs., 50 lbs. or more f.o.b. warehouse N Y lb. .39 • —
Calcium resinate, precip., dms., frt. alld., works lb. .45 • —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 • —
bgs., t.c.l., works .....lb. .06¼- —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. .....lb. .39 • —
ctns., t.c.l. .....lb. .40 • .44
Calomel, NF mild, powd., dms., 100-lbs., f.o.b. works lb. 4.32 • —
NF, mild, precip., dms., 100-lbs., f.o.b. works lb. 5.07 • —
Camphene, 46° m.p., dms incl., c.l., works lb. .15 • —
dms. incl., t.c.l., same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene chlorinated, 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 - 3.70
Camphor, syn., tech., 1 bbl. or more, lb. .43 • —
USP, powd., bbls., 1,000-lb. lots..lb. .56 • —
bbls., smaller lots .....lb. .57 • —
tablets, ctns., 1,000-lb. lots, lb. .80 • —
ctns., 500-lb. lots.....lb. .81 • —
ctns., smaller lots .....lb. .82 • —
Camphor oil, sassafrassy, dms. ..lb. .32 • .50
White, dms. .....lb. .24 • .40
Cananga oil, native, cns. .....lb. 5.00 - 6.50
Rectified, cns. .....lb. 7.25 -10.00
Candelilla wax, crude, bgs.....lb. .57 • .59
Refd., pure, bgs. .....lb. .61 • .63
Powdered Candelilla wax 20 to 100 mesh, 8c. higher.
Cantharides, Chinese, cs. .....lb. 1.00 • —
powd., bgs. .....lb. 1.15 • —
Russian, bgs. .....lb. 2.00 - 2.15
powd., bgs. .....lb. 2.15 2.30
Capric acid, dms.....lb. .27¼- .29¾
tanks .....lb. .24¾- —
Caprolactam monomer, flake, bgs., c.l., t.l., f.o.b. frt. equald. lb. .49 • —
bgs., l.c.l., l.t.l., same basis lb. .54 • —
molten, tanks, same basis .....lb. .46 • .462

Caprylic alcohol, 85% dms., c.l., t.l., works lb. .19 • —
dms., t.t.l., same basis .....lb. .19½- —
tanks, frt. equald. .....lb. .16½- —
Sec., 92-99%, dms., c.l., f.o.b. works lb. .22 • —
dms., t.c.l., f.o.b. works....lb. .23 • —
tanks, f.o.b. works .....lb. .19½- —
Caprylic acid, dms.....lb. .27¼- .29¾
tanks .....lb. .24¾- —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 • —
NF, from African pepper, dms. lb. 4.50 • —
Caraway oil, NF, dms .....lb. 4.25 - 4.50
Caraway seed, Danish, bgs. .....lb. .16 —
Dutch, bgs. .....lb. .16¼- —
Carbazole, 97%, bbls, ton lots, works lb. 1.05 • —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 • —
bgs., c.l., works .....lb. .08½- —
bgs., t.c.l., works .....lb. .16¼- —
Furnace, fast extruding, bgs., c.l., works..lb. .08¾- —
ctns, t.c.l., whse.....lb. .13½- —
high abrasion, bulk, c.l., works, lb. .07¼- —
bgs., c.l., works.....lb. .07¾- —
bgs., t.c.l., dlvd. or whse..lb. .14½- —
Carbon black, high modulus, bgs., c.l., works..lb. .08¼- —
ctns., t.c.l., whse.....lb. .13 • —
semi-reinforcing, bgs., c.l., works, lb. .05¾- —
bgs., ctns., t.c.l., whse....lb. .12½- —
pigment, high color beads, ctns., c.l., works..lb. .78 • —
ctns., t.c.l., dlvd. or whse..lb. .87 • —
medium color, uncompressed, bgs., c.l., works..lb. .14 • —
bgs., t.c.l., dlvd. or whse..lb. .22½- —

Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E ton.60.00 -115.00
bulk, 3,000,000 lbs. or more, dlvd. Metropolitan areas, E. ton.55.00 • —
Solid, bulk, wholesale, works ton.85.00 • —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 • —
55-gal. dms., t.c.l., same basis lb. .086 - .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 • —
5-gal. dms., less than 30 dms., same basis lb. .161 • —
tanks, f.o.b. works.....lb. .0450- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld. lb. .12¾- —
dms., t.c.l., frt. alld. .... lb. .13¼- —
Tech., consumers dms., c.l., t.l., frt. alld lb. .11¾- —
dms., t.c.l. t.t.l., frt. alld lb. .14¼- —
tanks, frt alld .....lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF dms., 100-lb lots, works lb. 4.00 - 4.25
dms., smaller lots, works..lb. 4.10 - 4.75
Cardamom oil, NF, bots.....lb.40.00 -43.00
Cardamom seed, bleached "A"..lb. 3.20 • —
Bleached "B" .....lb. 3.10 • —
Decorticated Alleppey, cs.....lb. 2.60 • —
Guatemala, cs. .....lb. 2.60 • —
Green, Alleppey, bgs. .....lb. 1.95 • —
Ceylon, bgs. .....lb. 2.00 • —

Carmine No. 40, NF, bulk, 100-lb lots or more dlvd. lb.16.80 —
bulk, smaller lots, dlvd. lb 16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .60 - .62
North Country, No. 2, crude, bgs., ton lots lb. .64 - .65
refd., pure, ton lots .....lb. .74 - .76
North Country, No. 3, Ceara, crude, ton lots lb. .58 - .60
North Country, No. 3, Parnahyba, crude, ton lots lb. .60 - .62
No. 3, refd., pure, bgs., ton lots. lb. .67 - .69
No. 1, Ceara, yellow, bgs., ton lots. lb. .90 - .92
Parnahyba, yellow, bgs., ton lots lb. .92 - .94
Powdered carnauba wax, 20 to 100 mesh 8c. per lb. higher.
Carotene, tech., 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram. .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 • —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 • —
b-Carotene, in vegetable oil, sci., solid suspension 400,000 A units per gram, cns kilo.57.60 • —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram, cns..kilo.72.00 • —

What's News in Enjay Resins...


Alkyd 2.0 mil. topcoat (No primer)
Buton 1.0 mil. primer
Buton 1.0 mil. topcoat over Buton 1.0 mil. primer
Buton 2.0 mil. topcoat (No primer)

All samples magnified 3 times

Buton® resin hard board coatings offer low fiber definition

Buton 300/nitrocellulose modified coatings can be applied by any of three systems — primer, topcoat, topcoat over primer. As you can see above, all three Buton systems result in quality coatings with practically no fiber definition. By comparison, notice the high fiber definition in an alkyd-based coating.

Buton resin primer and one-coat systems also offer high production rates. The Buton 300-based coatings above dry in 10 minutes at 120°-150°F ... become block-free to 20 p.s.i. after only 5 minutes' cooling. For more information, write to Enjay at 15 West 51st Street, New York 19, New York.

EXCITING NEW PRODUCTS THROUGH PETRO-CHEMISTRY
ENJAY CHEMICAL COMPANY
A DIVISION OF HUMBLE OIL & REFINING COMPANY
ENJAY

b-Carotene, pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns kilo 240.00 - —
Carvol, bots. lb. 5.00 5.40
Cascara sagrada bark, bulk lb. .32 - —
Casein, dom. edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more, works lb. .56 - —
80 mesh, bgs., 10,000-lb. lots or more, works lb. .64 - —
Imp., inedible, acid-precip., grd., Argentine bgs. c.l. ex-dock, Eastern seaport lb. .18⅜- .18⅞
Australian bgs c.l. same basis lb. .21 - .21½
New Zealand, same basis lb. .24 .25
Cashewnut shell liquid, treated, dms. c.l., Newark, N.J. lb. .24 - —
dms. ton lots, same basis lb. .25 - —
t.w., same basis lb. .22½- —
Cassella acid, dms. frt. alld., 100% basis lb 1.44 1.75
Cassia oil, redist., USP, cns. lb. 6.50 - 8.00
Cassia, Padang, "A," bls. lb. .28½- —
"B," bls. lb. .27½- —
"C," bls. lb. .27½- —
Korintje "A," bls. lb. .25½- —
"B," bls. lb. .27½- —
"C," bls. lb. .26½- —
lb. .25¼- —
Castor oil, dom., blown, dms., c.l. lb. .2550- —
dms., l.c.l. lb .2650- —
dehydrated, bodied, dms., c.l. lb. .2710- —
dms., l.c.l. lb. .2860- —
tanks lb. .2510- —
dehydrated, unbodied, dms., c.l., lb. .2560- —
dms., l.c.l. lb. .2660- —
tanks lb. .2360- —
hydrogenated, bgs., c.l. lb. .2425- —
bgs., ton lots lb. .2625- —
bgs., l.c.l., dlvd lb. .3025- —
raw, No. 1, dms., c.l. lb. .2200- —
dms., l.c.l. lb .2300- —
tanks lb. .2000- —
No. 3, tech., dms., c.l. lb. .2125- —
dms., c.l., lb. .2225- —
tanks lb. .1925- —
refd., deod., dms., c.l. lb. .2750- —
dms., l.c.l. lb. .2750- —
tanks lb. .2450- —
USP, dms., c.l. lb. .2550- —
dms., l.c.l lb. .2450- —
tanks lb. .2150- —
Imported, No. 1, Braz., tanks, New York—lb. .16¾- —
No. 3, tanks, same basis lb. .16¼- .16½
Sulfonated, 50%, dms., works lb. .15 .15½
75%, dms works lb. .19 .19½
Castor oil acids, dehydrated, dms. lb. .41¼- .43¾
Split, dms. lb .33¾- .34¾
Castor pomace, bgs., c.l., works ton 35.00 - —
Castoreum nat., cns. lb 5.25 - —
Syn., cns lb 9.00 - —
Catechol, CP, cryst., fib., dms., works lb 2.17½ —
Resub., dms. works lb 4.29½ —
Catnip leaves, Southern, bls lb Nominal
Caustic potash (see Potash caustic)
Caustic soda (see Soda caustic)
Cedarleaf oil, USP XIII, cns., dms lb. 3.30 - 3.50
Cedarwood oil, cns., dms. lb. 1.10 - 1.25
Celery seed oil lb. 12.00 - —
Celery seed, French, bgs. lb. .35 - —
Indian, bgs. lb. .26 - —
Cellulose acetate, flake, powd., bgs., f.f. dlvd E lb. .36 .51
Cellulose acetate butyrate, powd., 17% butyryl content, bgs., dlvd E lb. .545 .555
17% butyryl content, bgs. dlvd. E lb. .595 .605
38% butyryl content, bgs., dlvd. E lb. .545 .555
38% butyryl content, half-second, bgs., dlvd. E. lb. .545 - .555
50% butyryl content, bgs., dlvd. E lb. .585 .595
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure, high vis., bgs., 23,000 lb. lots or more, works, frt. alld lb .57 - —
bgs., smaller lots, same basis lb. .59 - —
standard, low or medium vis., bgs., c.l., t.l., frt. alld. E lb. .57 - —
bgs., ton lots, frt. alld. E lb. .59 - —
(Cellulose gum prices 1c. per lb. higher in west.)
Cerium hydrate (4% CeO, fib dms., 100-lb. lots or more lb 1.40 - —
77% CeO, fib dms. 100 lb. lots or more lb 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd. lb 1.85 1.90
bgs., smaller lots dlvd lb 2.15 —
Cetyl alcohol, NF, fib cns., c.l., t.l., dlvd E lb. 41½- —
fib cns., l.c.l. same basis lb. 43½- —
tanks, same basis lb .39 - —
Extra, cns. c.l., t.l., dlvd E lb 48½- —
fib cns. l.c.l., same basis lb 50½- —
tanks, same basis lb. .46 - —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian, lb. .95 - 1.10
Roman, ex. lb. 1.75 - 2.00
Chamomile oil, blue, Hungarian, bots lb 350.00 —
Charcoal, activated, NF, fib dms. c.l., works lb. .34 - —
fib. dms., 5-ton lots, works lb. .35 - .35½
fib dms, smaller lots, works lb. .36 .59
Charcoal, black (see Charcoal, activated)
Charcoal, bone (see Bone black).
Charcoal, hardwood, lump, bulk, c.l., f.o.b. plant ton 55.00 - —
briquets, bulk, c.l., f.o.b. plant ton 80.00 - —
5-lb. paper bgs. c.l., same basis ton 106.00 - —
20-lb. paper bgs. c.l., f.o.b. plant ton 90.00 - —
40-lb. paper bgs c.l. same basis ton 86.00 - —
Chenopodium oil, NF, cns lb 4.75 5.00
Chicago acid paste, bbls, frt. alld lb 3.21 - —
Chinawood oil (see Tung oil)
Chloral, tech., 94% min, dms., c.l., works lb .23 - —
dms., l.c.l., works lb .24 - —
tanks, multiple units, 5 cars, dms. l.c.l. works lb .21 - —
Chloral hydrate, USP, jars, 1,000-lb lots lb 1.00 - —
jars, 500-lb lots lb 1.03 - —
jars, 100-lb. lots or less lb 1.05 - —
Chlordan, agricultural, dms., c.l., frt. alld lb .65 - —
dms. l.c.l., 5,000-10,000 lb. lots, frt. alld lb .66 - —
clarified, dms., c.l., frt. alld lb. .69 - —
dms. l.c.l., 5,000-10,000-lb. lots, frt. alld lb .70 - —

Chlorinated paraffin, 40%., dms., c.l., frt. alld lb. .15 - —
dms. l.c.l., 10 dms or more, same basis lb. .16 - —
70%, dms., c.l., same basis lb. .18½- —
dms. l.c.l. 10 dms or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l. works lb. .60 - —
ctns., l.c.l., works lb. .61 - —
125 cps. ctns. c.l., works lb. .70 - —
300 cps. ctns., c.l., works lb. .80 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 - —
cyls., l.c.l., Metropolitan area, same basis lb. .12½- .13¾
tanks, single units, works, frt. lb.
tanks, multiple units, 5 cars, works, frt. equald, same basis 100 lbs. 3.25 —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.15 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 1 car, same basis 100 lbs. 5.35 - 5.85
Chloroacetic acid, mono, flake, 99%, purif. dms., c.l. lb. .23½- .25½
dms. l.c.l. lb. .24½- —
Tech., flake, 96-97%, dms., c.l., frt. equald lb. .19 - —
dms. t.c.l. frt equald lb. .20 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld lb 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb 1.38 - —
5-Chloro-2-aminotoluene, tech., liq., dms. frt. alld lb. .66 - —
m-Chloroaniline, dms. c.l., frt. alld. lb. .75 - —
dms., t.c.l., same basis lb. .77 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - —
dms., t.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., t.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb 1.05 - —
dms., t.t.l., same basis lb 1.20 - —
p-Chlorobenzaldehyde, dms., t.c.l., works lb. 1.95 - —
o-Chlorobenzoic acid, fib dms., t.l., works lb 1.10 - —
fib. dms., smaller lots, works lb 1.25 - —
p-Chlorobenzoic acid, fib dms., 2,000-lbs or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms. c.l. dlvd. E lb. .18 - —
dms., t.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms., c.l., dlvd lb. .27 - —
dms., l.c.l., dlvd lb. .30 - —
tanks, minimum 4,000 gals, dlvd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .90 - —
Powd., dlvd. E., 100% basis lb. 1.00 - —
4-Chloro-2-nitroaniline, powd. dlvd. E lb. .86 - —
4-Chloro-2-nitrophenol, tech., paste, dms. frt. alld lb. .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .99 - —
o-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .25 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms. t.c.l. same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt equald lb. .37 - —
dms t.c.l. same basis lb. .38 - —
Chloropicrin, comi., cyls., 180 lbs., frt alld lb 1.07 - —
cyls., 100 lbs., same basis lb 1.08 - —
cyls., 50 lbs., same basis lb 1.14 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb .0465- —
dms., t.c.l. frt equald lb .0515- —
tanks, frt equald lb .0415- —
Chlorosulfonic acid, in stainless steel dms ½c per lb higher
o-Chlorotoluene, tech., dms., t.l., works lb. .37 - —
dms., t.c.l., t.t.l., same basis lb. .38 - —
Choline bitartrate, 100-lb. dms., frt. equald lb. 1.25 - —
Choline chloride, 100-lb dms., frt. equald lb. 1.25 - —
Choline dihydrogen citrate, 100-lb. dms. frt. equald lb. 1.25 - —
Chrome green (P. dark, light medium blue content, 1-15%, bbls dlvd E of Rockies. lb. .43 - —
blue content 16-30%, bbls., same basis lb. .44 - —
41-45%, bbls., same basis. lb. .44 - —
blue content, 45-49%, bbls., same basis lb. .45 - —
reduced color 25%, bbls., same basis lb. .20 - —
Chrome green prices 1c higher W. of Rockies
Chrome orange CP bbls. dlvd E of Rockies lb. .35 - —
Chrome orange prices 1c higher W. of Rockies
Chrome yellow CP bbls. dlvd E. of Rockies lb. .35 - —
Chrome yellow price 1c. higher W. of Rockies
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½- —
dms. t.c.l. dlvd N. Y. Metropolitan area lb. .30 .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works. lb. .10 —
Chromium fluoride, bbls, works lb. .51 .52
Chromium oxide, hydrated, bbls., fib dms. c.l. frt. alld. lb. 1.20 —
Pure, bgs., c.l., frt alld lb. .44½ —
bgs. l.c.l. same basis lb. 45¼- —
Chromium trioxide, NF, bots lb 1.15 —
Cinchona bark, NF, red, broken, bgs lb 25 - —
NF, yellow, broken, bgs lb .35 .40
Cinnamic acid, recd., bots lb 2.50 3.50
Cinnamic alcohol, bots lb 1.50 1.60
Cinnamic aldehyde, dms lb .80 1.00
Cinnamon, Ceylon, No. 2, bgs. lb. .55 - —
Ceylon, No. "0002," bgs. lb. .64 - —
Cinnamon bark oil, bots lb. 55.00 - 74.00
Cinnamon leaf oil, crude, dms lb 1.60 2.00
USP (Cassia), cns., dms lb 8.50 13.50
Citral, CP, bots lb. 4.65 - 5.55
Extra, bots lb. 5.00 - 5.55
Syn., dms. lb. 6.10 - 6.65

Citric acid, USP anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 .30½
bgs., dms., smaller lots lb. .30½- .31
USP, hydrous, fine gran., bgs., dms., c.l lb. .27½- .28½
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 .28½
bgs., dms. smaller lots lb. .29 .29½
Powdered citric acid ½c. per lb. higher
Citronella oil, Ceylon, dms. lb. 1.05 - —
Formosan, dms. lb. 1.05 - —
Citronellol, bots, dms. lb. 1.90 2.50
Synthetic, dms. lb. 1.70 - —
Civet, artif., bots oz. 8.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton. 17.50 -21.50
crushed shed moisture, bulk, c.l., Tenn ton. 8.00 -11.25
imp. airfloated, bgs., c.l., Atl. port net-ton. 43.00 -47.00
lump, bulk, Atl. port net-ton. 31.50 -37.50
Clay, China, dom., dry-grd., air-floated, 99%, 325 mesh, Georgia bgs., c.l., works. ton. 11.00 -17.00
Georgia bgs. t.c.l., works. ton. 13.50 -22.50
Imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me long-ton. 23.00 -35.00
white, powd., bgs. c.l., ex dock net-ton. 50.00 —
bgs., l.c.l. ex whse net-ton. 60.00 -70.00
Cleaner's naphtha, petroleum, 105°F Flash, tankcars, New Jersey and New York gal. 18 —
Group 3 gal. .12@75 —
Houston, Texas gal. .145 —
140 F Flash, tankcars, New Jersey or New York gal. .205 —
Group 3 gal. .154 —
Houston, Texas gal. .17 —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
1.6 tech., solid, dms. frt. alld lb. .77 - —
1.7 tech., dms. frt. alld. lb. 2.42 - —
Clove bud oil, USP, dms. lb. 2.55 - —
Cloves, Madagascar, bgs. lb. .38 - .38½
Zanzibar, bgs. lb. .39 - .42
Clove leaf oil, crude, dms. lb. 1.10 - —
CMC, crude, 96.4% low or medium vis bgs., 23,000 lbs., dvld. E., 100% basis lb. .40 - —
96.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd. E., 100% basis lb. .42 - .46
65% low or medium vis., bgs., c.l., dlvd. E., 100% basis lb. .40 - —
l.c.l., dlvd. E., 100% basis lb. .42 - 1.00
CMC, purif, high vis. (see Cellulose gum).
CMC prices W. of the Rockies are ½c. per lb. higher and are on a dlvd. basis.
Coaltar, crude, resale for soln., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., t.c.l., ex whse gal. .39 - —
tanks works gal. .20½- —
Coaltar pitch, aluminum, bulk, Works ton. 42.00 - —
Carbon, bulk works ton. 42.00 - —
Indust., bulk, works ton. 44.00 - —
Core, bulk works ton. 40.50 - —
Fiber, bulk works ton. 48.00 - —
Roofing, 140-155°F., Federal Specification RP-381, Type I tanks, works ton. 41.00 - —
Cobalt acetate, 23.4% Co., dms., dlvd lb. 1.04 - —
Cobalt blue, genuine, 250 lb. bbls., dlvd E of Rockies lb. 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies
Cobalt blue, imitation (see Ultramarine blue)
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 1.97 - —
Cobalt linoleate, fused, 8½% Co., dms lb. .71½- —
Liq., 6% Co., dms lb. .57½- —
Cobalt metal, 99% dms., f.o.b. carrier lb. 1.50 - —
Cobalt naphthenate, liq., 6% Co., dms., dlvd lb. .48¾- —
Cobalt nitrate, 20.1% Co., bbls. dlvd. lb. .75 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd E of Mississippi R. lb. 1.15 - —
70-71% Co, kgs. same basis lb. 1.12 - —
Cobalt oxide prices W. of Mississippi R. 3c. per pound higher
Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb. 1.35 - —
Cobalt resinate, fused, 3% Co., dms. lb. .38¼- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb. .64 - —
Monohydrated, 33% Co., dms., dlvd lb. 1.09 - —
Cobalt tallate, 6% Co., dms., dlvd. lb. .44 - —
Cocaine, USP, cns., 100-oz. lots, f.o.b. works oz. 17.50 - —
Cocaine hydrochloride, cns., 100-oz. lots f.o.b. works oz. 13.75 - —
Cocillana bark, bls. lb. .20 - .22
Cocoa butter, bgs lb. .54 - .59
Coconut oil, crude, tanks, New York, lb. .12¼- —
tanks, Pac. coast lb. .10⅞- —
refined, deod., dms lb. .18 - .19
Coconut acid, oil, dist., dms. lb. .21½- .24
tanks lb. .19 - —
double dist. (stripped), dms., lb. .22½- .25
tanks lb. .20 - —
Cod oil, dms., spot lb. .08⅛- .08⅜
Codeine, NF, cns. 100-oz lots oz. 13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 - —
Codeine sulfate, USP, cns. 100-oz. lots oz. 10.75 - —
Codliver oil, USP, dms gal. 1.40 - 1.70
Cohosh root, black, bls lb. .20 .25
Blue, bls lb. .20 .25
Colchicine, USP, bots. lb. 27.50 -29.00
Colchicum root, bls lb. .35 .45
Colchicum seed, bgs. lb. .85 .90
Collodion, USP, dms. lb. .32½- —
USP, flexible, dms lb. .34 - —
Colocynth pulp, bls lb. .75 - —
Colombo root, bls lb. .16 - .18
Condurango, bark, bls lb. .18 - .20
Congo copal gum, No. 1, bgs lb. .26 - .27
No. 2, bgs. lb. .30 - .35
No. 3, bgs. lb. .22 - .25
Copaiba balsam, cns., dms lb. .85 - .95
Copaiba oil, cns lb. 1.35 2.00
Copper acetate, bbls., c.l., works, bbls. lb. .53 - —
t.c.l. works lb. .54 - —
Copper carbonate, 55%, dark dense, c.l., works lb. .3545- —
bgs., l.c.l., works lb. .3695- —
Copper chloride, cupric, anhyd., dms., works lb. .44½- .45
cryst., dihydrate, dms., works, cryst., dried, dms., works lb. .30¾- .31¼
cuprous, dms., works lb. .3985- .4295

Copper cyanide, tech., dms., 20,000-lb lots or more lb. .809 - —
dms., 1,000-lb. lots or more lb. .619 - —
dms., smaller lots lb. .639 - —
Copper gluconate, dms lb. 3.20 - —
Copper hydrate, dry, dms. c.l., frt. E. of Miss lb. .52½- —
dms., t.c.l., same basis lb. .53 - —
Copper metal, electrolytic, dlvd. Valley, basis lb. .31 - —
Copper naphthenate, liq., 8% Cu, dms. frt alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾ .32¼
Copper oleate, solid, 9% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .47 - —
red., 97%, USN Type 1, bbls., 100-5,000 lbs. lots lb. .47½- —
90%, USN type II, bbls. 100-5,000-lb lots or more, works lb. .45½- —
Copper quinolinolate, 18% Cu, dms., ton lots lb 4.25 - —
10% active quinolinolate, dms lb 1.14 - 1.15
Copper resinate, precip., dms., frt. alld lb. .47 - —
Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works 100 lbs. 12.50 - —
Monohydrated, 35%, dms., c.l., works 100 lbs. 13.00 -15.50
dms., l.c.l., works 100 lbs. 23.35 - —
Tribasic, distributors, 50-lb. c.l., works 100 lbs. 24.10 - —
bgs., l.c.l., works 100 lbs. 28.60 - —
Copper undecylenate, dms lb 2.75 - —
Copra, Atl., Gulf ports ton. 155.00 - —
Pac. coast, c.i.f ton. 150.00 - —
Coriander oil, USP, bots. lb. 5.75 - 6.25
Coriander seed, Moroccan, bgs. lb. .19 - —
Rumanian, bgs. lb. .14 - —
Yugoslavian, bgs lb. .08½- —
Corn oil, crude, tanks, works lb. .20 - —
Foots, (soapstock, 95% acid) tanks, New York lb. .06½- —
Refd., salad, dms. lb. .2673- .27
tanks lb. .2473- —
Corn oil, acid, dms. lb. .16 - .18½
tanks lb. .13½- —
Corn sugar, tanners, chipped, paper bgs. c.l., 60,000 lbs. min. 100 lbs. 7.30 - —
paper bgs., l.c.l. 100 lbs. 7.45 - —
Corn syrup, 43° Be., tanks, dlvd. N.Y. 100 lbs. 6.30 - —
non-ret. dms. c.l., same basis, 100 lbs. 7.23 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bots., kilo or more, gram .85 - .90
Costus oil, bots oz. 6.00 - —
Cottonseed meal, 41%, bgs., Memphis t.n. 55.00 -56.00
Cottonseed oil, crude, tanks, South, East lb. .12¼- .12⅜
tanks, Valley lb. .12⅛- —
tanks, Tex., Waco lb. .12 - —
Foots (soapstock, acid 95%), New York, tanks lb. .04½- —
Refd., salad, dms. lb. .18⅛- .18⅜
tanks lb. .16½- —
Cottonseed oil acids, dist., dms. lb. .16 - .18½
tanks lb. .13½- —
Coumarin, NF, cryst., dms. lb. 3.20 - 3.30
Cramp bark, NF, bls. lb. .90 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots, cbys., lb. 3.05 3.28
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
Crude, soln 80%, tanks, works, Refd., dms., c.l., works gal. .226 - —
dms., l.c.l., same basis gal. .50 - —
tanks, same basis gal. 62 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar
Creosote, beechwood, chys., dms., f.o.b. works, dlvd. in Metropolitan area lb. 1.73 - 1.77
Hardwood, NF chys. dms. same basis lb. 1.42 - 1.47
Pinewood, dms. incl. c.l., works, lb. .0611- —
dms. incl., l.c.l., works lb. .0684- —
dms. incl., l.c.l. ex whse, New York, works lb. .0795- —
tanks, works lb. .0511- —
Creosote oil (see Creosote coaltar).
Cresol, tech. 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 - —
USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., same basis lb. .18 - —
non-ret. dms., l.c.l., same basis, lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol, 95-98% dms., c.l., works. lb. .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 - —
dms., t.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
2.97% 2°C, dms., c.l., frt. equald, dms., t.c.l., same basis lb. .22 - —
tanks, same basis lb. .23 - —
o-Cresol, 30.5°C. m.p. and over, ret., dms., c.l., frt equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30°-30.49°C. m.p., dms., c.l., frt., equald lb. .16½- —
ret. dms., t.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
29°-29.9°C, m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., t.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25°-28°C m.p., dms. c.l., frt. equald lb. .15 - —
ret. dms., t.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 98%, dms., c.l., f.o.b., frt. alld. lb. .50 - —
dms., l.c.l., same basis lb. .52 - —
tanks, same basis lb. .45 - —
p-Cresyl methyl ether, cns lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., metapara content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald gal. 1.35 - —
dms., t.c.l., same basis gal. 1.40 - —
tanks, same basis gal. 1.15 - —
metapara content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., t.c.l., same basis gal. 1.25 - —
tanks, frt. equald gal. 1.00 - —
Imp., metapara content 25% or less, f.o.b. works, frt. equald to competitive points, c.l. gal. 1.15 - —
l.c.l., f.o.b., works gal. 1.20 - —
tanks, same basis gal. 1.00 - —

Crotonaldehyde, 91-93%, dms., l.c.l. works lb. .25 • —
Crotonic acid, 200-lb. dms., c.l., dlvd. lb. .49 • —
dms., l.c.l., dlvd lb. .51 • —
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 • —
bgs., l.c.l., works 100 lbs. 14.25 • —
Cubeb oil, cns lb. 8.50 • 8.75
Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 • —
bgs., l.t.l., works lb .22 • —
Cubeb berries, NF, bgs. lb. 1.30 • —
Powd., cs. lb. 1.45 • —
Cumene, dms., c.l., works lb. .12 • —
dms., l.c.l., works lb. .14 • —
tanks, works lb. .11 • —
Cumin seed, Iranian, bgs. lb. .18 • —
Turkish, bgs. lb. .18 • —
Cumin seed oil, bots., cns lb. 15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract ton. 57.00 • —
pulv., 21% N, bgs., works, unit-ton. 2.85 • —
Cyanamide, indust. grade, bgs., c.l., works ton. 75.00 • —
bgs., t.c.l., works ton 96.00 • —
Indust grade 6-16 mesh, dms., c.l., works ton. 120.00 • —
dms. t.c.l., works ton. 140.00 • —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E of Rockies gal 1.02 • —
dms. l.c.l. same basis gal 1.10 • —
dms., c.l. dlvd W of Rockies gal. .77 • —
tanks, works gal. .55 • —
98% tech. 40-dm. lots or more, f.o.b works gal. .56 • —
5-39 dms. same basis gal. .60 • —
tanks, same basis gal. .36 • —
Cyclohexanol tech., dms., c.l., works, frt. alld. E lb. .30½ • —
dms. t.c.l. works, same basis, tb. .31½ • —
tanks, works, same basis lb. .28 • —
Cyclohexanone tech., dms., c.l., works lb. .33½ • —
dms., t.c.l. works lb. .34½ • —
tanks, works lb. .31 • —
Cyclohexylamine tech., dms., c.l., works lb. .49 • —
dms. t.c.l. works lb. .50 • —
tanks, works lb. .47 • —
Cypress oil, bots. lb. 5.30 • —

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2,4-D tech. bgs. dms., c.l., works, frt. equald lb. .40 —
bgs. dms. t.c.l. same basis lb. .45 .49
2,4-D butyl ester dms. c.l., works. lb. .43 —
dms., t.c.l., same basis lb. .48 .52
tanks, same basis lb. .42 —
2,4-D isopropyl ester, dms., c.l., works lb. .43 —
dms. t.c.l. works lb. .48 .52
tanks, works lb. .42 —
Dammar gum Batavia, A E, cs lb. No stocks.
East India Batu, bold, bgs lb. .15½ .18
nubs and chips, bgs lb. .10 • .11
black, bold, bgs lb. .16 • .18
nubs and chips, bgs lb. .13 • .14½
unscraped bgs lb. .13 • .14½
East India, pale, chips, bgs. lb. .16 • .18
pale nuhs bgs lb. 20¾ .24
Siam cs lb. 31½ .34
Singapore No. 1, bgs. lb. .38 • .44
No 2, bgs. lb. .29 .32
dust, bgs. lb. .18 .20
No 3, bgs. lb. No stocks.
Dandelion root, bls lb. .35 .40
DDD, tech. flake, grd., fib. dms., c.l., works lb. .45 • .47
tib dms., t.c.l., works lb. .46 • .48
DDT, flake or lump, bgs., c.l., dlvd lb. .21 • —
bgs., smaller lots, same basis. lb. .23 • —
fib. dms., c.l., same basis lb. .22 • —
fib dms., smaller lots, same basis lb. .25 • —
Powdered DDT 1c. per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate)
l-Decanol, tech., dms., c.l., dlvd E. lb. .41½ • —
dms., l.c.l., dlvd. E lb. .43½ • .44½
tanks, dlvd. E lb. .37½ • —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .20½ • —
dms., l.c.l., dlvd lb. .22 • —
tanks, dlvd. lb. .18 • —
Perfume grade, bots. lb 1.00 • 2.00
Decyl alcohol normal (see l-Decanol)
Deertongue leaves, bls lb. .50 • .60
Defluorinated phosphate, feed grade 14% P, paper bgs., c.l. t.l., Tupelo, Miss ton. 52.00 • —
18% P, paper bgs., c.l., Plant City, Fla ton. 61.25 • —
18% P, paper bags, c.l., t.l., Port Arthur, Tex ton. 65.75 • —
paper bags, c.l., works, Wales, Tenn ton. 66.00 • —
19% P, paper bgs., c.l., t.l., works, Houston, Tex ton. 69.35 • —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l prices
Degras common (15-17% free fatty acid), 400-lb dms lb. .12 • .14
Neutral (over 2% free fatty acid), 400-lb dms lb. 13 • —
Denatured alcohol, ethyl CD-18, CD-19, dms., c.l., dlvd. E. of Rockies gal. .69½ • —
dms., t.c.l., same basis gal. 74½ • .80½
tanks, dlvd, same basis gal 53½ —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd E of Rockies gal. .72 —
dms., t.c.l., same basis gal. 77 .83
tanks, same basis gal. .56 —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd E of Rockies gal. .70½ —
dms. t.c.l. same basis gal. 75½ .81½
tanks, same basis gal. .54½ —
SD2B, dms. c.l., dlvd. E of Rockies gal. .69 —
dms., t.c.l., same basis gal. .74 • .80
tanks, same basis gal. .53 • —
SD3A dms. c.l. dlvd. E of Rockies gal. .68 • —
dms. t.c.l same basis gal. 73 • .79
tanks, same basis gal. .52 • —
SD23A, dms., c.l., dlvd. E. of Rockies gal. .70½ —
dms., t.c.l., same basis gal. .75½ .81½
tanks, same basis gal. .54½ —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 —
dms., t.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
SD29, dms., c.l., dlvd. E. of Rockies gal. .69½ —
dms., t.c.l., same basis gal. .74½ • .80½
tanks, same basis gal. .53½ • —
SD30, dms., c.l. dlvd. E. of Rockies gal. .68 • —
dms., t.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —

Denatured alcohol, ethyl, SD35A, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., t.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
SD-40, dms., dlvd. E. of Rockies. gal. .70½ • —
dms., t.c.l., same basis gal. .75½ • .81½
tanks, same basis gal. .54½ • —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher.
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms lb. 15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb 6.60 • —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.39 • —
paper bgs., l.c.l. 100 lbs. 9.54 • —
canary dark, paper bgs., c.l. 100 lbs. 9.23 • —
paper bgs., l.c.l 100 lbs. 9.38 • —
Indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.13 • —
paper bgs., l.c.l 100 lbs. 9.28 • —
white paper bgs., c.l. 100 lbs. 8.97 • —
paper bgs., l.c.l 100 lbs. 9.12 • —
Corn dextrin in cotton bgs 15c. per 100 lbs higher
Dextrose, anhyd., comi., bgs., c.l. 100 lbs 8.65 • —
bgs, l.c.l 100 lbs 8.80 • —
Anhyd. special, aluminum foil lined fib. dms., 200-lb dms 100 lbs. 14.70 • —
100-lb. dms 160 lbs. 15.20 • —
Hydrated, coml., bgs., c.l. ex ex whse 100 lbs. 7.45 • —
bgs. c.l., ex whse 100 lbs. 7.60 • —
USP dms lb. .19¾ —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½ • —
dms., t.c.l., dlvd. lb. .17 • —
tanks, dlvd lb. .13 • —
Tech., dms., c.l., dlvd. lb. .15 • —
dms., l.c.l., dlvd. lb. .16½ • —
tanks, dlvd lb. .12½ • —
Diacetyl, flavor grade, bots lb. 3.30 4.30
Di-sec-amyl phenol, dms., c.l., works lb .32 • —
dms., t.c.l., works lb. .33 • —
tanks, works lb. .29½ • —
Di-tert-amyl phenol, dms., c.l., works lb. .32 • —
dms., t.c.l., works lb. .33 • —
tanks, works lb. .29½ • —
Diallylamine, dms., c.l., dlvd. lb .98½ • —
dms. t.c.l., dlvd. lb 1.00 • —
tanks, dlvd lb .96 • —
o-Dianisidine dry, tech., fib dms. lb 2.00 • —
Dibenzyl sebacate dms. c.l., works. lb. .93 —
dms., l.c.l., same basis lb. .93½ .94
tanks, same basis lb. .91 —
Dibromobenzene, bgs., 500-lb lots. lb. .55 • —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd lb. .65 • —
t.t.l., dms., same basis lb. 68 • —
Food grade, c.l. t.l. dms., dlvd. lb. .65 • —
dms. t.t.l., same basis lb. 68 • 1.10
Tech., Jms., c.l., t.l., dlvd. lb. .57 • —
dms., l.c.l., same basis lb. .60 • —
tanks, same basis lb. .54 • —
Dibutyl fumarate, dms., c.l., t.l., dlvd E lb. .31½ • —
dms., l.c.l., t.l., dlvd E lb. .33 • —
tanks, dlvd E lb. .29 • —
Dibutyl maleate, dms., c.l., t.l., dlvd E lb. .31½ • —
dms., l.c.l., t.l., dlvd E lb. .33 • —
tanks, dlvd. E lb. .29 • —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .30½ • —
dms., l.c.l., same basis lb. .32 • —
tankcars, tanktrucks, 2,000 gals., same basis lb. .28 • —
tanktrucks, 1,000-1,999 gals. same basis lb. .28 • —
Dibutyl sebacate, dms., c.l., works. lb. .67½ • —
dms., t.c.l., works lb. .68½ • —
tanks, works lb. .65½ • —
Dibutyl tartrate, dms., works, frt. alld lb. .65½ • —
Dibutylamine, dms., c.l., dlvd lb. .55½ • —
dms., l.c.l., same basis lb. .57 • —
tanks, same basis lb. .53 • —
Dicapryl phthalate, dms., c.l., dlvd. lb. .26 • —
dms., l.c.l., dlvd. lb. .27½ • —
tanks, dlvd. lb. .23½ • —
Dicapryl sebacate, dms., c.l., works. lb. .63 • —
dms., t.c.l., works lb. .63½ • .64
tanks, works lb. .61 • —
2,5-Dichloroaniline, dms., works lb. .83 • —
3,4-Dichloroaniline, tech., solid, tanks frt alld lb. .73 • —
o-Dichlorobenzene dms. c.l., frt. alld. E lb. .12¾ • —
dms., t.c.l., same basis lb .13¾ • —
tanks, same basis lb. .11 • —
p-Dichlorobenzene, dms., c.l., t.o.b., works, frt. alld. E lb. .12 • —
dms. 2,000 lbs or more same basis lb. .14½ • —
1,4-Dichlorobutane, dms. c.l., or t.l., works lb. .33½ • —
dms., t.c.l., or t.t.l., works lb. .34 • —
tanks, works lb .32 • —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd E lb. .15½ • —
dms., t.c.l., t.t.l., same basis lb. .17 • —
tanks, same basis lb. .13 • —
Dichloroisocyanuric acid, dms., c.l., t.l. frt. equald lb. .65 • —
dms. t.c.l. same basis lb. .75 • —
Dichloropentanes dist., dms., c.l., works lb. .05 • —
dms., t.c.l., works lb. .06 • —
tanks works lb 03 • —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine dms. c.l., works. lb. .54 • —
dms., t.c.l., works lb. .55 • —
tanks, works lb. .52 • —
Dicyclohexyl phthalate, gran., fib. dms. c.l. works frt alld. lb. .49½ • —
fib. dms., l.c.l., same basis lb. .51½ • —
Dicyclopentadiene dms. c.l., t.o.b. works lb. .14½ • —
dms., t.c.l., same basis lb. .14¾ • —
tanks, same basis lb. .12 • —
Didecyl phthalate dms. c.l., works. lb. .26½ • —
dms., l.c.l., same basis lb. .28 • —
tankcars, tanktrucks, 2,000 gals. lb. .23 • —
tanktrucks 1,000-1,999 gals, same basis lb. .24½ • —
Dieldrin, dms., c.l. dlvd. lb. 1.85 • —
dms., l.c.l. dlvd lb. 1.90 • —
Diethanolamine dms., c.l., dlvd E. lb. .27 • —
dms., t.c.l., same basis lb. .28½ • —
tanks, same basis lb. .24½ • —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½ • —
dms., t.t.l., frt. alld. lb. .28½ • —
tanks, frt. alld lb. .26½ • —
Diethyl barbituric acid (see Barbital).

Diethyl carbonate, dms., c.l., f.o.b. works lb. .47¼ • —
dms., t.c.l., same basis lb. .48¼ • —
tanks, same basis lb. .45 • —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½ • —
dms., t.c.l., dlvd. lb. .71 • —
tanks, dlvd. lb. .67 • —
Diethyl oxalate, dms., c.l., f.o.b. works lb. .42½ • —
dms., t.c.l., same basis lb. .43½ • —
tanks, same basis lb. .40 • —
Diethyl phthalate, dms., c.l., dlvd. lb. .28¼ • —
dms., t.c.l. dlvd. lb. .29¾ • —
tanktrucks, 1,000-1,999 gals. same basis lb. .25¾ • —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb. .25¼ • —
Diethyl sulfate, dms, c.l., frt. alld. E lb. .21 • —
dms., t.c.l., frt. alld. E lb. .22½ • —
tanks, frt. alld. E lb. .18½ • —
Diethyl thiourea, dms., c.l., t.l., works lb. .58 • —
dms. t.c.l., same basis lb. .59 • —
Diethyl toluamide, 90-95% meta isomer dms. c.l. t.l., works. lb. 2.30 • —
5-44 dm lots, works lb 2.35 • —
1-4 dm lots, works lb 2.40 • —
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 • —
Diethylamine dms. c.l., dlvd E lb. .52 • —
dms. t.c.l., same basis lb. .53½ • —
tanks, same basis lb. .49½ • —
N,N Diethylaniline dms., c.l., frt. alld lb. .57 • —
dms. t.c.l., same basis lb. .58 • —
tanks, same basis lb. .55 • —
Diethylbenzene, 380 lb dms., c.l., t.l., frt alld., Zone 1 lb. .17½ • —
f.o.b. Zone 2 lb. .18½ • —
380-lb. dms., t.c.l., c.l., f.o.b. Zone 1 lb. .19½ • —
f.o.b. warehouse points, Zone 2 lb. .20½ • —
tankcars, Zone 1 lb. .15 • —
Zone 2 lb .16 —
Zone 1 is East of the Rockies. Zone 2, West of the Rockies
Di-2-ethylhexyl adipate (see Di-octyl adipate).
Di-2-ethylhexyl phthalate (see Di-octyl phthalate).
Diethylene glycol dms c.l. dlvd E. lb. .17¾ • —
dms. t.c.l. same basis lb. .19¼ • —
tanks same basis lb. .15¼ • —
Diethylene glycol diethyl ether, dms., c.l., works lb. .55 • —
dms., t.c.l., works lb. .55¾ • —
Diethylene glycol monobutyl ether, c.l., dms., frt alld. E lb. .30¾ • —
dms., t.c.l., frt. alld. E lb. .32¼ • —
tanks, frt. alld. E lb. .28¼ • —
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾ • —
dms., t.c.l., works lb. .31½ • —
tanks, works lb. .28¾ • —
Diethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .22½ • —
dms., t.c.l., dlvd. E lb. .24 • —
tanks dlvd E lb. .20 • —
Diethylene glycol monoethyl ether acetate dms. c.l., works. lb. .27¼ • —
dms. t.c.l., works lb. .28 • —
tanks, works lb. .25¼ • —
Diethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 • —
dms., t.c.l., dlvd. E lb. .22½ • —
tanks dlvd E lb. .18½ • —
Diethylenetriamine dms., c.l. dlvd. E lb. .44 • —
dms. t.c.l. dlvd E. lb. .45½ • —
tanks, dlvd E lb. .41½ • —
Diethylstilbesterol USP, bots. 10-kilo lots kilo 100.00 147.50
bots 1 kilo lot kilo 110.00 152.50
Digitalis leaves USP dom dms lb 1.25 —
Digitoxin, USP, bots gram 3.75 4.20
Diglycol laurate dms. ton lots lb. .32½ • —
Diglycol stearate dms. t.l lb. .26 • —
Digycollc acid bgs c.l. t.l. works. lb. .15½ • —
bgs t.c.l. works lb. .16 • —
Dihexyl sebacate dms. c.l., works. lb. .66 • —
dms., t.c.l., works lb. .67 • —
tanks, works lb. .64 • —
Dihydrazine sulfate dms., works lb. 1.10 1.25
Dihydrostreptomycin sulfate bulk. gram .023 • .03
1,2-Dihydroxy anthraquinone, dms., works lb 3.45 • —
2,2-Dihydroxy-5-5-dichloro-diphenyl methane, pure, dms lb 2.55 • —
Tech., dms., 20,000 lbs or more lb 1.11 • —
dms. 1,050 lbs to 20,000 lbs. lb 1.13 • —
dms. 150 lbs to 1,050 lbs lb 1.15 • —
Di-isobutyl ketone dms. c.l. dlvd. lb. .17 • —
dms. t.c.l. dlvd. lb. .18½ • —
tanks dlvd lb. .14½ • —
Di-isobutyl phthalate, dms., c.l., dlvd. E lb. .29 • —
dms., l.c.l., same basis lb. .30½ • —
tanks, same basis lb. .26½ • —
Di-isobutylene dms. c.l., dlvd. E lb. .10 • —
dms., l.c.l., dlvd E lb. .11½ • —
tanks dlvd E lb. .08 • —
Di-iso-octyl phthalate, dms., c.l., works lb. .26 • —
dms., l.c.l., same basis lb. .27½ • —
tanktrucks, 1,000-1,999 gals. works lb. .24 • —
tankcars, tanktrucks, 2,000 gals., works lb. .23½ • —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 • —
dms., l.c.l., works lb. .61¼ • —
tanks, works lb. .60 • —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼ • —
dms., t.c.l., same basis lb. .24¾ • —
tanks, same basis lb. .20¾ • —
Di-isopropylamine dms., c.l., dlvd. E. of Rockies lb. .50½ • —
dms., t.c.l., same basis lb. .52 • —
tanks, same basis lb. .48 • —
Dillweed oil, dom., bots., dms lb. 4.50 • —
Dimethyl anthranilate, cns. lb 4.15 • —
Dimethyl dichlorovinyl phosphate, 55-gal dms., dlvd lb. 3.50 • —
Dimethyl ethanolamine, anhyd., dms., c.l., dlvd. E lb. .78 • —
dms., l.c.l., dlvd. E lb. .79½ • —
tanks, dlvd E lb. .75½ • —
Dimethyl ethanolamine, 70%, dms., c.l., dlvd., 100% basis, contained amines lb. .78 • —
dms., t.c.l., dlvd., 100% basis. lb. .79½ • —
tanks, dlvd., 100% basis lb. .75½ • —
Dimethyl hydroquinone, dms. lb. 1.90 2.20
Dimethyl phthalate, dms., c.l., works lb. .28¼ • —
dms., l.c.l., works lb. .29¾ • —
tanktrucks, 1,000-1,999 gals., same basis lb. .26¼ • —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25¾ • —

Dimethyl sebacate, dms., c.l., works. lb. 1.30 • —
dms., l.c.l., works lb. 1.30½ - 1.31
tanks, works lb. 1.28 —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½ • —
ret. dms., t.c.l., works lb. .18½ • —
tanks, works lb. .16½ • —
Dimethyl sulfide, dms., c.l., works. lb. .17½ • —
dms., l.c.l., works lb. .18½ • .19½
tanks, works lb. .15 • —
Dimethyl sulfoxide, dms., c.l., f.o.b. works lb. .35 • —
dms., t.c.l., same basis lb. .37 • .38
tanks, same basis lb. .33 • —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 • —
dms., l.c.l., frt. equald, 100% basis lb. .38½ • —
Dimethylamine, 25% soln., tanks, frt. equald, 100% basis lb. .28 • —
40% soln., dms., c.l., frt. equald., 100% basis lb. .35 • —
dms., l.c.l., frt. equald, 100% basis lb. .35½ • —
tanks, frt. equald., 100% basis lb. .28 • —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 • —
dms., t.c.l., same basis lb. .29 • —
tanks, same basis lb. .26 • —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½ • —
dms., t.c.l., works lb. .33 .34
tanks, works lb. .30 • —
2,4-Dinitroaniline, dms., frt. alld lb. .75 • —
Dinitroaniline orange toner, CP, bbls., dlvd E. of Rockies. lb. 1.61 • —
Dinitroaniline orange toner prices 1c. higher W of Rockies.
m-Dinitrobenzene, 89°C., dms. lb. .26 —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C. dms., c.l., frt. alld. E lb. .17¼ • —
dms., t.c.l. frt. alld E. lb. .17¾ • —
tanks, frt. alld. E. lb. .17 • —
2,4-Dinitrophenol bbls. lb. .41 • —
2,4-Dinitrotoluene, oil, dms. lb. .11 • —
Refd. 63°C. dms. lb. .23 • —
Dioctyl adipate, dms., c.l., works. lb. .37½ • —
dms., l.c.l., works lb. .39 • —
tanks, works lb. .35 • —
Dioctyl phthalate, dms., c.l., frt. alld. E lb. .26 • —
dms., l.c.l., frt. alld. E lb. .27½ • —
tanktrucks 1,000-1,999 gals., same basis lb. .24 • —
tankcars, tanktrucks, 2,000 gals., same basis lb. .23½ • —
Dioctyl phthalate prices ¾c. higher in West.
Dioctyl senacate dms., c.l., works. lb. .59 • —
dms., l.c.l., works lb. .59½ • .60
tanks, works, dlvd lb. .57 • —
1,4-Dioxane, dms., c.l., frt. alld. E. lb. .31½ • —
dms., l.c.l., frt. alld. E lb. .33 • —
tanks, frt. alld. E lb. .29 • —
Prices in the west are 2c per lb. higher.
Dipentaerythritol bgs. c.l. t.l., dlvd. E lb. .34 • —
bgs., l.c.l., t.t.l., dlvd E lb. .35 • —
Dipentene, dest.-dist., dms., c.l., works gal. .58 • —
dms., t.c.l. works lb. .62 • —
dms., l.c.l. ex whse. gal. .78 • —
tankscars, works gal. .41 • —
Dipentane, steam dist., dms., c.l., works South gal. .72 • —
dms., t.c.l., dlvd New York gal. .91 • —
tanks, works, South lb. .55 • —
Dip oil (see Tar acid oil).
Diphenolic acid 1,000-lb or more, bgs., works lb. .75 • —
Diphenolic polyether acids, 1,000-lb. or more bgs. works lb. 1.00 • —
Diphenyl, bgs. c.l. t.l., works lb. .16¾ • —
bgs., l.c.l., works lb. .18½ • —
tanks, works lb. .15¾ • —
Diphenyl oxide perfume grade cns. lb. .55 • .70
Diphenyl phthalate dms., c.l., works. lb. .51 • —
dms., l.c.l., works lb. .53 • —
Diphenylamine retd flake, bgs., c.l., works frt. equald lb. .32 • —
bgs., t.c.l., same basis lb. .34 • —
Refd., fused tanks same basis. lb. .29 • —
Refd. diphenylamine in dms., ½c. per lb higher
Diphenylguanadine bgs., dms., ton lots, frt. alld lb. .51 • —
bgs., smaller lots, frt. alld lb. .52 • —
Diphenylhydantoin-sodium, USP, dms lb. 5.00 5.60
Dipropylene glycol dms., c.l., frt. alld lb. .17 • —
dms. t.c.l. frt alld. lb. .18½ • —
tanks, frt alld lb. 14¼ —
Dipropylene glycol prices 1c. higher in West.
Dipropylene glycol methyl ether, dms. c.l., dlvd. E lb. .20 • —
dms. t.c.l. same basis lb. .21½ • —
tanks, same basis lb. .18½ • —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.80 • —
Di-o-tolylguanidine dms. ton lots, frt. alld lb. .71 • —
dms., smaller lots, frt. alld lb. .72 • —
Di-o-tolylthiourea, tech. solid, dms., c.l. t.l. frt alld lb. .56 • —
Divinylbenzene, 20-25% dms., c.l., works, frt equald lb. .20 • —
dms., t.c.l., same basis lb. .21 • —
tanks, same basis lb. .19 • —
50-60% dms. c.l., works, 100% basis lb. 1.00 • —
dms., t.c.l., works, 100% basis. lb. 1.05 • —
tanks, same basis lb. .90 • —
Dodecenyl succinic anhydride dms., c.l., t.l., dlvd. E lb. .50 • —
dms, t.c.l., t.t.l., same basis lb. .52 • —
Dodecylbenzene, dms., c.l., t.o.b., works, frt equald lb. .134 • —
dms., t.c.l., same basis lb. .144 • —
tanks, same basis lb. .11 • —
Dodecylphenol c.l. frt. alld lb. .22½ • —
dms., l.c.l., same basis lb. .23½ • —
tanks, same basis lb. .20 • —
Dodecylphenol prices on shipments to Western States are 2c per pound higher
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 25-lb.lots, frt. prepaid or alld.
Blue, FD&C, No. 1 lb. 15.65 -16.45
No. 2 lb. 15.65 -16.45
Green, FD&C, No. 1 lb. 15.65 -16.45
No. 2 lb. 19.60 -20.40
No. 3 lb. 31.30 -32.10
Red, FD&C, No. 2 lb. 3.60 - 4.40
No. 3 lb. 19.60 -20.40
No. 4 lb. 6.00 - 6.80
Yellow, FD&C, No. 5 lb. 3.75 - 4.55
No. 6 lb. 3.65 - 4.45

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:

Black, D&C, No. 1	lb.	12.40	-13.00
Brown, D&C, No. 1	lb.	16.35	-16.95
Green, D&C, No. 5	lb.	17.00	-17.60
No. 6	lb.	17.40	-18.00
No. 7	lb.	14.35	-14.95
Orange, D&C, No. 3	lb	10.50	-10.95
No. 4	lb.	19.60	-20.05
No. 5	lb	3.80	4.25
Red, D&C, No. 17	lb.	12.55	-13.15
No. 18	lb.	23.55	-24.15
No. 19	lb.	15.00	-15.45
No. 21	lb	3.90	4.35
No. 22	lb	10.50	-10.95
No. 28	lb.	27.90	-28.50
No. 37	lb	17.00	-17.45
Violet, D&C, No. 2	lb.	15.65	-16.10
Yellow, D&C, No. 7	lb.	10.50	-10.95
No. 8	lb.	0.50	-10.95
No. 10	lb.	15.10	-15.70
No. 11	lb.	14.80	-15.40

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb. lots, dlvd.:

Blue Ext. D&C, No. 1	lb	15.65	-16.10
Green, Ext. D&C No. 1	lb	15.65	-16.10
Red, Ext., D&C., No. 1	lb	13.05	-13.50
Yellow Ext. D&C. No. 1	lb	10.50	-10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd No.

11110 Brilliant scarlet BN	lb	1.79	- —
13390 Fast blue SR	lb.	1.57	- —
14025 Yellow 2G	lb.	1.32	- —
14030 Orange R extra, conc.	lb	1.64	- —
14645 Chrome black F	lb	1.72	- —
14720 Rubine XX, conc	lb	1.76	- —
15510 Orange Y, extra conc.	lb	.83	- —
15575 Orange RR	lb.	1.10	- —
15620 Fast Red A, conc.	lb.	1.77	- —
15705 Chrome blue black R, conc.	lb	1.12	- —
16150 Scarlet 2RL	lb	1.22	- —
16255 Brilliant scarlet 3RN, conc.	lb.	1.34	- —
16230 Fast light, orange 2G	lb.	1.39	- —
17580 Brown PG	lb	3.00	- —
18050 Phloxine 2G	lb.	1.16	- —
18055 Fuchsine 6B	lb.	1.55	- —
18965 Fast yellow 2G	lb.	2.44	- —
19140 Yellow XX	lb	2.48	- —
19555 Yellow NN conc.	lb	3.67	- —
20170 Brown Y	lb	1.33	- —
20470 Blue black, extra, conc	lb.	1.44	- —
21010 Brown, RX, conc	lb.	1.42	- —
22240 Scarlet B	lb	2.81	- —
22310 Red FC	lb	1.57	- —
22311 Brown MCW	lb.	1.59	- —
22610 Blue 2B, extra conc	lb.	1.51	- —
23500 Red 4BX, conc.	lb	1.80	- —
24410 Sky blue FF extra conc.	lb	1.95	- —
24895 Brilliant yellow conc	lb	3.27	- —
26360 Navy blue 3R, conc	lb	1.94	- —
26695 Black F, conc.	lb	2.30	- —
26900 Milling Red 3R, conc	lb	2.24	- —
27075 Neutral black 2B, conc	lb.	2.75	- —
27720 Gray L	lb.	2.18	- —
29185 Fast scarlet 4BN	lb	2.23	- —
30015 Diazo black VJ conc	lb	2.48	- —
30045 Yellow brown K, extra	lb	1.45	- —
30235 Black EB, 200%	lb	1.33	- —
30295 Green BY conc.	lb	1.07	- —
35960 Brown B	lb	2.89	- —
37565 Naphthol SWF	lb	1.85	- —
40000 Yellow 2G	lb	1.44	- —
41000 Yellow OX	lb	2.45	- —
42000 Green V crystals	lb	2.73	- —
42040 Brilliant green G crystals	lb	3.62	- —
42640 Violet 4BXN	lb	2.43	- —
42090 Blue EG	lb	1.85	- —
42100 Milling green 6B, conc.	lb	4.78	- —
42830 Brilliant blue, BBG	lb	2.44	- —
44045 Blue B, extra conc.	lb	3.61	- —
45170 Red BX	lb	4.76	- —
50415 Nigrosine SSJ	lb	1.03	- —
52015 Blue GXX	lb	2.54	- —
58005 Alizarin red SC	lb	3.64	- —
58700 Golden orange GFD, single paste	lb	2.70	- —
58710 Flaming orange 6RD double powder	lb	4.90	- —
58800 Dark blue BO, single paste.	lb.	2.28	- —
58825 Jade green NC supra, double paste	lb.	1.75	- —
61570 Alizarin green CG, extra	lb.	4.00	- —
63010 Alizarin blue SAPG	lb	3.90	- —
63615 Alizarin blue black B	lb	3.26	- —
69825 Blue BLFD double paste	lb	2.76	- —
70800 Brown BR single paste	lb	2.03	- —

Dyes, coaltar, oil-soluble, 100 lb. drums, dlvd. No.

12140 Oil scarlet BL	lb.	1.87	- —
12055 Oil orange 7078 V	lb.	1.38	- —
26120 Oil red N 1700	lb.	1.94	- —
42535B Methyl violet base	lb	3.11	- —
44045B Victoria blue base	lb.	4.06	- —
50415B Oil black 8603	lb.	.80	- —
61565 Alizarin cyanine green base.	lb.	6.13	- —

Dyes, coaltar, spirit soluble, 100 lb. drums., dlvd., Black RB lb. 3.89 - —

Spirit brown CN	lb	3.50	- —
Spirit orange R conc.	lb	5.87	- —
Spirit red B conc.	lb	0.41	- —
Pr 517 Spirit yellow 2R conc	lb	4.62	- —
Pr 554 Spirit blue FHN	lb	5.06	- —

E

Echinacea root, bls.	lb.	1.25	- —
Elm bark, grinding, bls.	lb.	.30	- .32
Powd., bbls., bxs.	lb.	.60	- —
Select, bundles	lb.	.75	- —
Emetine hydrochloride, USP, bots	oz.	48.40	- —
Endrin, tech., drms., 100-lbs. or more, 100% basis, dlvd	lb.	2.77	- —
Eosin red toner, bbls., works	lb.	1.95	- —
Ephedrine, syn., USP, anhyd., bots. 100-oz.lots	oz.	.98	- 1.00
hydrous, bots., 100-oz. lots.	oz.	.92	- —
Ephedrine hydrochloride, NF, dms., 100-oz., f.o.b. works	oz.	.75	- —
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b. works	oz.	.73	- —
USP, powd., dms., 100-oz., same basis	oz.	.73	- —
Epichlorohydrin, dms., c.l., dlvd	lb.	.29½	- —
dms., l.c.l., dlvd.	lb.	.31	- —
tanks, dlvd.	lb.	.27	- —
Epinephrine base, syn., USP, bots., 100 gram lots	gram.	.58	- —
Epsom salt (see Magnesium sulfate).			
Erigeron oil, cns.	lb.	11.00	- —
Ergot, NF, dms., tin-lined	lb.	2.00	- 2.50
Eserine salicylate, bots.	oz.	34.50	-40.00
Eserine sulfate, bots.	oz.	26.00	- —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va	lb.	.18½	- —
Ester gum, wood-rosin type, dms., c.l. same basis	lb.	.18½	- —
Ether (see specific product).			
Ethyl acetate, nat., ferment, 85-88%, dms., c.l. dlvd	lb.	.15	- —
dms., l.c.l., dlvd.	lb.	.16½	- —
tanks, dlvd.	lb.	.12½	- —
95-98%, dms., c.l., dlvd.	lb.	.15¼	- —
dms., l.c.l., dlvd.	lb.	.16¾	- —
tanks dlvd	lb.	.12¾	- —
99%, dms., c.l., dlvd	lb.	.15½	- —
dms., l.c.l., dlvd	lb.	.17	- —
tanks, dlvd.	lb.	.13	- —
Syn., 85-88%, dms., c.l., dlvd.	lb.	.15	- —
dms., l.c.l., dlvd.	lb.	.16½	- —
tanks, dlvd	lb.	.12½	- —
95-98%, dms., c.l., dlvd	lb.	.15¼	- —
dms., l.c.l., dlvd	lb.	.16¾	- —
tanks dlvd	lb.	.12¾	- —
99%, dms., c.l., dlvd	lb.	.15½	- —
dms., l.c.l., dlvd.	lb.	.17	- —
tanks dlvd.	lb.	.13	- —
Ethyl acetoacetate, dms., c.l., dlvd.	lb.	.58½	- —
dms., l.c.l., dlvd.	lb.	.60	- —
tanks, dlvd	lb.	.56	- —
Ethyl acrylate, dms., c.l., t.l., dlvd.	lb.	.34¾	- —
dms., l.t.l., dlvd	lb.	.35¾	- —
tanks, dlvd.	lb.	.32¼	- —
Ethyl alcohol, 190 pf., USP, tax paid dms. c.l., dlvd E of Rockies	gal	20.63	- —
dms. l.c.l. same basis	gal.	20.73	-20.84
USP, tax-free, dms., c.l., dlvd. E. of Rockies	gal.	.68	- —
Ethyl alcohol, 190 pf., USP, tax free, dms., l.c.l., same basis	gal.	.78	- .89
tanks, same basis	gal	.52	- —
Ethyl alcohol, absolute 200 pf., tax paid, dms. dlvd E of Rockies	gal	21.75	- —
dms., l.c.l., same basis	gal	21.85	-21.90
tanks, same basis	gal	21.59	- —
Ethyl alcohol denatured (see Denatured alcohol ethyl)			
Ethyl aminobenzoate, USP (see Benzocaine).			
Ethyl amyl ketone dms. c.l., dlvd.	lb.	.20	- —
dms. l.c.l. same basis	lb.	.21½	- —
tanks, same basis	ln	17½	- —
Ethyl benzoate bcts.	lb.	.75	1.00
Ethyl bromide tech., 98%, dms., c.l., frt. alld. E	lb.	.43	- —
dms. l.c.l. frt alld E	lb.	.45	- —
tanks, frt. alld. E	lb.	.40	- —
2-Ethyl butyl alcohol, dms., c.l., works	lb.	.30	- —
dms., l.c.l., works	lb	.30¾	- —
tanks, works	lb.	.28	- —
Ethyl butyl ketone dms. c.l., t.l., works	lb.	.36	- —
dms l.c.l., t.l. works	lb	.36¾	- —
tanks works	lb.	.34	- —
Ethyl butyrate dms. works	lb.	.85	1.00
Ethyl carbamate (see Urethane)			
Ethyl cellulose, vis. 6 cps. ogs., 5,000 lb lots or more, frt. alld E	lb.	.73	- —
ogs smaller lots frt alld E	lb.	.75	- —
vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E	lb.	.68	- —
Ethyl cellulose, vis., 10.20.50.100.150 cps., bgs., smaller lots, frt. alld. E	lb.	.70	- —
Ethyl chloride tech. cyls. works.	lb	.20	22
dms. works	lb	18	20
tanks works	lb	10	- —
Ethyl cinnamate, cns	lb.	3.35	3.50
Ethyl ethanolamines, mixed, dms., c.l., dlvd E	lb.	43½	- —
dms. c.l. dlvd E	lb.	44½	- —
tanks dlvd E	lb	41½	- —
Ethyl ether, absolute ACS dms	lb	.27	- —
Anesthesia USP dealers, 1-lb. cns	lb	1.01	- —
½ lb cns	lb	1.09	- —
¼-lb cns.	lb	1.21	- —
Indust. dms. c.l. dlvd.	lb	.13½	- —
dms., l.c.l., dlvd E	lb.	.15	- —
tanks dlvd E	lb.	.11	- —
2-Ethyl hexoic acid dms., c.l., t.l., dlvd E	lb.	.37	- —
dms. l.c.l., t.l., dlvd E	lb.	.38½	- —
tanks, dlvd E.	lb.	.34½	- —
2-Ethyl hexoic acid 1c. higher W. of Rockies.			
2-Ethylhexyl acrylate, dms., c.l., t.l., straight or mixed frt. alld. E	lb.	.39½	- —
dms., l.t.l., same basis	lb.	.40½	- —
tanks, same basis	lb.	.37	- —
2-Ethylhexyl alcohol, dms., c.l., dlvd. E	lb.	.20½	- —
dms., l.c.l., dlvd, E	lb.	.22	- —
tanks, dlvd. E	lb.	.18	- —
Ethyl iodide chys. works	lb	3.30	- —
Ethyl methacrylate dms. c.l., frt equald	lb	.52	- —
dms. l.t.l. frt. equald	lb	52½	- —
tanks frt equald	lb	50	- —
Ethyl morphine hydrochloride, USP bots	oz.	11.85	- —
Ethyl oenanthate dms	lb	1.05	1.30
Ethyl oxalate (see Diethyl oxalate)			
Ethyl silicate dist (see Tetraethyl orthosilicate).			
Ethyl silicate 40% available SiO, dms., c.l., dlvd. E	lb.	.49	- —
dms., l.c.l., dlvd. E	lb.	.50½	- —
tanks, dlvd. E	lb.	.47	- —
N-Ethyl-a-naphthylamine dms. works	lb	1.04	- —
N-Ethyl-m-toluidine tech., liq., tanks frt alld	lb	.83	- —
N-Ethyl-o-toluidine, bbls	lb.	.88	- —
Ethylamine (see Mono- Di- or Tri-)			
N-Ethylaniline dms. c.l. frt. alld.	lb	.57	- —
dms. l.c.l. frt. alld	lb	.58	- —
tanks frt alld	lb.	.55	- —
Ethylbenzene 99% dms., c.l., t.l., frt. equald	lb.	.14	- —
dms l.c.l., same basis	lb.	.16	- —
tanks, same basis	lb.	.11¼	- —
Ethylene, contract refy gate	lb	.0475	.0525
Ethylene dibromide dms. c.l., frt. equald	lb	.30½	- —
dms. l.c.l. frt. equald	lb	.31½	- —
tanks frt equald	lb.	.28½	- —
Ethylene dichloride dms. c.l. dlvd.	lb	.11½	- —
dms. l.c.l., same basis	lb.	.13	- —
tanks, same basis	lb	.09	- —
Ethylene dichloride prices W. of Rockies, 1c per lb higher			
Ethylene glycol, indust., dms., c.l., dlvd E	lb.	.16	- —
dms., l.c.l., same basis	lb.	.17½	- —
tanks, same basis	lb.	.13½	- —
Ethylene glycol monobutyl ether, dms. c.l., dlvd E	lb.	.22	- —
dms. l.c.l., dlvd E	lb.	.23¼	- —
tanks, dlvd E	lb.	.19½	- —
Ethylene glycol monoethyl ether, dms. c.l., dlvd E	lb.	.21	- —
dms., l.c.l., dlvd. E	lb.	.22½	- —
tanks, dlvd E	lb.	.18½	- —
Ethylene glycol monoethyl ether acetate, dms., c.l. dlvd. E	lb.	.19½	- —
dms., l.c.l., dlvd. E	lb.	.21	- —
tanks, dlvd E	lb.	.17	- —
Ethylene glycol monomethyl ether, dms. c.l., dlvd E	lb.	.21	- —
dms. l.c.l., dlvd E	lb.	.22½	- —
tanks, dlvd E	lb.	.18½	- —
Ethylene glycol monomethyl ether acetate, dms., c.l. dlvd, works	lb.	.29	- —
dms., l.c.l., works	lb.	.29¾	- —
tanks, works	lb.	.27	- —
Ethylene glycol monostearate, flake, 150-lb. ctn	lb.	.33	- —
Ethylene oxide, dms., c.l., dlvd E	lb.	.21½	- —
dms., l.c.l., dlvd. E	lb.	.24½	- —
tanks, dlvd E	lb.	.15½	- —
Ethylene trichloride (see Trichloroethylene)			
Ethylenediamine 85-88%, dms., c.l., dlvd. E., 100% basis	lb.	.40	- —
dms l.c.l. dlvd E. 100% basis.	lb.	.41½	- —
tanks, dlvd. E., 100% basis	lb.	.38	- —
Ethylvanillin, 100-lb. fib. dms., 500-lb.	lb.	6.75	- —
less than 500-lb.	lb.	7.40	- —
Eucalyptol, USP, cns., dms	lb.	.85	1.40
Eucalyptus oil, NF, rectified, 70-75% dms	lb.	.45	- —
NF rectified, 80-85% dms	lb	.53	- .62
Eugenol, tech., dms	lb.	0.00	- —
USP, dms.	lb.	1.90	- —
Euphorbia herb, bls	lb.	.12	- .15

F

F salt paste, tech., dms., works	lb.	2.50	- —
Fennel oil, sweet, USP, cns.	lb.	2.60	- —
Fennel seed, Argentine, bgs	lb.	.17½	- —
French, light, bgs.	lb.	.16½	- —
Indian, light, bgs.	lb.	.16½	- —
Yugoslav, light, bgs.	lb.	.17½	- —
Fenugreek seed, Moroccan, bgs.	lb.	.12	- —
Ferric chloride, anhyd., tech., 350-lb. dms., c.l., works 100 lbs.		8.00	- —
dms., l.c.l., works 100 lbs.		9.00	- —
Indust., cryst., bbls., c.l., works, 100 lbs.		5.25	- 6.75
bbls. l.c.l., works 100 lbs		5.75	7.25
Ferric chloride 42° Be., photo grade, cbys., c.l. works 100 lbs.		7.25	- 8.25
sewage grade, tanks, frt equald. 100% basis 100 lbs		4.00	- —
USP cryst. dms. t.l. works	lb.	.08½	- —
Ferric citrate, gran., dms.	lb.	.86	- —
Ferric hypophosphite, NF, 175-lb. dm	lb.	4.25	- —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb.		.28¼	- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E	lb.	1.30	- —
Ferric oxides (see iron oxides)			
Ferric phosphate NF, soluble, gran pearls, cs	lb.	.72	- .75
Ferric pyrophosphate, NF VII, soluble, gran. pearls, 225-lb dm.	lb.	.79	- —
Ferric resinate, dms., ton lots, frt. alld	lb.	.45	- —
Ferric stearate dms. c.l. frt alld.	lb.	.39	- —
dms. l.c.l. frt alld	lb.	40	- .44
Ferric sulfate partly hydrated, bgs. c.l., works	ton.	35.25	- —
bgs., l.c.l., works	ton.	36.25	-42.25
bulk, c.l., works	ton.	33.25	- —
Ferric-ammonium citrate, NF, brown, gran., 100-lb. dms lb.		.68	- —
NF, green, gran., 100-lb. dms., frt equald lb.		.68	- —
Ferric-ammonium oxalate, fine gran., dms lb.		.27½	- .29½
Ferric-potassium oxalate, fine gran., 250-lb dm., f.o.b. works lb.		.32½	- —
Ferric-sodium oxalate, fine gran., dms lb.		.27½	- .29½
Ferrous gluconate, USP, 200-lb. dm., frt equald lb.		.96	- —
Ferrous sulfate, gran. bgs., c.l., works ton.		34.50	- —
bgs., l.c.l., dlvd. Metropolitan area 100 lbs		3.35	4.25
bbls., c.l., works ton.		40.00	- —
bulk, c.l., works ton.		27.00	- —
USP cryst., bbls., dms lb		09½	- .10
Fir balsam, Canada, bbls gal.		34.00	-35.00
Oregon, bbls gal.		3.40	4.64
Fir oil, Canada, cns lb.		1.70	- 1.75
Fish oil, refd., alkali, dms lb.		.1380-	.1430
Kettle-bodied, dms. lb.		.1530-	.1580
Light-pressed, dms. lb.		.1230-	.1330
tanks lb.		.1080-	—
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units.		.13	- —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton.		118.00	-120.00
Fishscrap, dom., menhaden, dried, 60% protein, grd. bgs., Atlantic and Gulf coasts. ton.		114.00	-116.00
Fleaseed (see Psyllium seed)			
Folic acid, USP, nots fib. dms., kilo lots or more gram.		.25	- —
10% feed grade fib dms., 5 kilos or more kilo.		30.00	-44.00
Formaldehyde, 37% inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd lb.		.0690-	—
tanks, dlvd. lb.		.0430-	—
37% (inhibited, 7% methanol) tanks, dlvd lb.		.0405-	—
44% (1% methanol), tanks lb.		.0446-	—
methanol-free (uninhibited), tanks, dlvd lb.		.0375-	—
Formic acid 85% cbys. c.l., works. lb.		.1570-	—
cbys., l.c.l., works lb.		.1620-	.1720
90% cbys., c.l., works lb.		.1625-	—
cbys., l.c.l., works lb.		.1675-	.1775
Fringetree bark, bls lb.		.65	.70
Fumaric acid, tech., 250-lb dms., c.l. frt. equald lb.		23¼	- —
dms., l.c.l. frt equald lb.		.24¾	- —
Fumaric acid in bags ½c. per lb less.			
Furfural, dms c.l. works lb.		.13	- —
dms. l.c.l., works lb.		.14	- —
tanks, dlvd. E lb.		.11½	- —
tanks, dlvd W lb.		.12½	- —
Furfuryl alcohol, cns., works lb.		.28	- —
dms., c.l., t.l., Newark, N. J lb.		.19½	- —
dms., l.c.l., t.l., Newark, N. J lb.		.20½	- —
dms., c.l., t.l., Memphis, Tenn lb.		.18	- —
dms., l.c.l., t.l., Memphis, Tenn. lb.		.19	- —
tanks, dlvd. E. of Denver lb.		.175	- —
Fusel oil, refd., dms., c.l., dlvd lb.		.18	- —
dms., l.c.l., dlvd. lb.		.19½	- —
tanks, dlvd. lb.		.15½	- —

G

G salt, bbls, frt. alld., 100% basis	lb.	73	- —
Gallic acid, NF VII, bbls., 1,000-lb. lots	lb	2.00	- —
bbls., smaller lots	lb	2.02	2.22
Tech., bbls., 1,000-lb. lots	lb.	1.78	- —
bbls. smaller lots	lb	1.80	2.00
Gamma acid, dry grd., bbls., frt. alld	lb.	1.75	- —
Gammapicoline (see g-picoline).			
Garlic oil, dom., bots.	oz.	4.75	6.05
Imp., bots.	oz.	4.50	5.00
Gaultheria oil (see Wintergreen oil).			
Gelatin, edible, 75 AOAC test, bbls., c.l., dlvd lb.		.55	- —
150 AOAC test, bbls., c.l., dlvd. lb.		.64	- —
200 AOAC test, bbls., c.l., dlvd. lb.		.70	- —
225 AOAC test, bbls., c.l., dlvd. lb.		.74	- —
275 AOAC test, bbls., c.l., dlvd. lb.		.82	- —
Gelsemium root, bls.	lb.	.30	- .35
Gentian root, bls.	lb.	.34	- —
Grd., bbls., bxs.	lb.	.36	- —
Powd., bbls., bxs.	lb.	.30	- —
Geraniol, extra cns., dms.	lb.	1.75	2.40
Soap grade, dms.	lb	.90	1.75
Standard, cns., dms.	lb.	1.65	- —
Synthetic, dms	lb	1.30	- —
Geranium oil, Algerian, cns.	lb.	21.00	-24.00
Bourbon, cns.	lb.	14.00	-18.00
Turkish (see Palmarosa oil).			
Geranyl acetate, cns	lb	1.90	2.70
Synthetic, dms	lb.	1.45	- —
Ginger oil, dist., bots.	lb.	12.00	-14.00
Ginger oleoresin, NF from African root, bots	lb.	4.25	5.00
NF from Jamaican root, bots.	lb.	7.75	- —
Ginger root, Cochin, bgs.	lb.	.20	- —
Jamaican, No. 3, bgs.	lb.	.26	- —
Nigerian, split, bgs.	lb.	.23	- —
Sierra Leone, bgs.	lb.	.32	- —
Glauber's salt (see Sodium sulfate).			
Gluconic acid, tech., 50% dms., c.l., t.l., f.o.b. works	lb.	.20	- —
dms., l.c.l., f.o.b. works	lb.	.21	- —
tanks, f.o.b. works	lb.	.17	- —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd	lb.	.16	- —
131 jellygrams, bgs., c.l., same basis	lb.	.16½	- —
164 jellygrams, bgs., c.l., same basis	lb.	.18½	- —
191 jellygrams, bgs., c.l., same basis	lb.	.19½	- —
222 jellygrams, bgs., c.l., same basis	lb.	.21	- —
Glue, green, 40 jellygrams, bgs., c.l., same basis	lb.	.16	- —
86 jellygrams, bgs., c.l., same basis	lb.	.16	- —
115 jellygrams, bgs., c.l., same basis	lb.	.16½	- —
Glue, green, bone, 135 jellygrams, bgs., c.l., same basis	lb.	.17½	- —
164 jellygrams, bgs., c.l., same basis	lb.	.18½	- —
180 jellygrams, bgs., c.l., same basis	lb.	.19½	- —
200 jellygrams, bgs., c.l., same basis	lb.	.20½	- —
Bone glue, l.c.l., prices 2c. higher.			
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd	lb.	.18	- —
95-149, bgs., c.l., dlvd	lb.	.19	- —
122-149, bgs., c.l., same basis	lb.	.20½	- —
150-177, bgs., c.l., same basis	lb.	.22½	- —
178-206, bgs., c.l. same basis	lb.	.25	- —
207-236, bgs., c.l. same basis	lb.	.28	- —
237-266, bgs., c.l., same basis	lb.	.30½	- —
267-293, bgs., c.l., same basis	lb.	.32½	- —
299-330, bgs., c.l., same basis	lb.	.34½	- —
331-362, bgs., c.l., same basis	lb.	.36½	- —
363-394, bgs., c.l., same basis	lb.	.38	- —
395-427, bgs., c.l., same basis	lb.	.40	- —
428-460, bgs., c.l., same basis	lb.	.42	- —
461-494, bgs., c.l., same basis	lb.	.44	- —
495-529, bgs., c.l., same basis	lb.	.46	- —
Hide glue, l.c.l. prices 2c. higher.			
l-Glutamic acid, 99½%, fib. dms., 100-lb lots, frt alld	lb.	1.80	- —
fib. dms. 25-lb. lots, frt. alld.	lb	1.88	- —
l-Glutamine, bots., 1-9 kilo lots,	kilo.	150.00	-300.00
Bots., 50-kilo lots	kilo.	100.00	- —
Bots. 500-kilo lots	kilo.	75.00	- —
Glycerine dom., nat., crude, saponification 88% tanks dlvd,	lb.	.13½	- .14
nat., crude, soaplye, 80% tanks, dlvd	lb.	.12½	- .12¾
nat., refd., USP CP, 99% dms., c.l., dlvd	lb.	.26¾	- —
dms., l.c.l., dlvd	lb.	.27¼	- —
tanks, dlvd.	lb.	.24½	- —
Dom., nat., refd., USP, CP, 96% dms., c.l., dlvd	lb.	.25½	- —
dms., l.c.l., dlvd.	lb.	.26¼	- —
tanks, dlvd.	lb.	.23¾	- —
nat., high gravity, dms., c.l., dlvd	lb.	.26¼	- —
dms., l.c.l., dlvd	lb.	.27	- —
tanks, dlvd.	lb.	.24½	- —
Dom., refd., syn., 99.5%, dms., c.l., dlvd	lb.	.26½	- —
dms., l.c.l., dlvd	lb.	.27¼	- —
tanks, dlvd.	lb.	.24¾	- —
Imp., nat. crude, soaplye, 80%, c.l.f.	lb.	.12½	- —
Glycine (see Aminoacetic acid).			
Glycerol (see Glycerine).			
Glyceryl guaiacolate, 100-lb. fib. dm., dlvd	lb.	4.00	- —
25-lb. fib. dm., dlvd.	lb.	4.25	- —
Glycolic acid (see Hydroxyacetic acid).			
No. 2, 90-95%, bgs., fib. dms., ex whse	lb.	.29	- .31
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works	lb.	.40	- —
dms., l.c.l., same basis	lb.	.42	- —
tanks, same basis	lb.	.39	- —
Glyoxal, 30%, dms., c.l., works	lb.	.20½	- —
dms., l.c.l., works	lb.	.21¼	- —
tanks, works	lb.	.18	- —
Golden seal root, NF, tested, bls.	lb.	2.90	- 3.00
Gramicidin, 1 to 5 kilos, f.o.b. works,	gram.	4.25	- —
Grapefruit oil, dms.	lb.	2.60	- 2.75
Graphite, amorp., powd., bgs., fib. dms., ex whse	lb.	.06	- .09½
Cryst., 88-90% powd bgs., fib. dms., ex whse	lb.	.19	- .21½
90-92% powd., bgs., fib dms., ex whse	lb.	.21	- .24½
Cryst., 95-97%, powd., bgs., fib. dms., ex whse	lb.	.29	- .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb.	.29	- .31
Grease white, choice all nog, tanks, dlvd	lb.	.07½	Nom.
Yellow, tanks, dlvd	lb.	.05	- —
Grease oil, No. 1, dms., c.l., f.o.b. Chicago	lb.	.12	- —
dms., l.c.l., same basis	lb.	.14	- —
tankcars, same basis	lb.	.10½	- —
Grease oil, extra winter, strained, dms., c.l. Chicago	lb.	.15	- —
dms., l.c.l., same basis	lb.	.17	- —
tankcars, same basis	lb.	.13½	- —
Prime, burning, dms., c.l., same basis, Chicago	lb.	.17	- —
dms., l.c.l., same basis	lb.	.19	- —
tankcars, same basis	lb.	.15½	- —
Other areas ¾c. higher, except Texas and West Coast, 1¼c. higher.			

GREEN PIGMENTS

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green

Grindelia robusta herb, bls	lb	.40	
Guaiacol, NF, cryst., dms., tins	lb	2.10	2.15
liq., cbys., dms	lb	2.30	- 2.40
Guaiacwood oil, cns	lb	.65	.80
Guaiacol carbonate, NF VII, dms	lb	3.40	3.45
Guar gum, edible, bgs., c.l., f.o.b. shipt. pt	lb.	.38	- —
bgs., l.c.l. same basis	lb.	.40	.42
Indust., bgs., c.l., same basis	lb.	.32	- —
Tech., bgs., c.l., same basis	lb.	.30	- —

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls., c.l., frt. alld., 100% basis lb. 1.00 - —
bbls., l.c.l., same basis lb. 1.05 - —
Hansa yellow 10 G, bbls., dlvd. E. of Rockies lb 2.45 —
Hansa G yellow, pigment, bbls. lb. 2.20 - —
Hawthorn berries, bgs. lb. .18 - .20
Heliotropin 100-lb lots, dms. lb. 2.60 - 3.40
Hellebore root dom. green, bls lb. .70 - .75
Helonias root bls. lb. 1.50 - —
Hemlock oil, cns. lb. 2.55 3.00
Henbane leaves, bls lb. .40 - .45
Heptachlor dms. c.l., t.l., frt. alld., 100% basis lb. .96 - —
Heptane, indust., tankcars, New Jersey and New York gal. .20 —
Houston, Texas gal. .1625 —
Hesperidin, purif., 50 kilos, f.o.b. works kilo. 19.70 - —
Hesperidin methylchalcone, 50 kilos, f.o.b. works kilo. 49.25 - —
Hexachlorophene dms., 1,100 lbs. or more lb 1.84 - —
dms. to 1,100 lbs. lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb lots or more, Perth Amboy or New York City lb. .233 - —
bgs., 1,000-19,999-lb. lots, same basis lb. .243 - —
bgs., smaller lots, same basis lb. .253 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib dms. smaller lots, same basis lb. .253 - —
Hexamethylenetetramine, USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia lb. .42½- —
bgs., smaller lots, same basis lb. .43½- .48½
Hexane, industrial, tankcars, New Jersey and New York gal. .20 - —
Houston, Texas gal. .16 - —
1-Hexanol, dms., c.l., works lb. .35 - —
dms., l.c.l., works lb. .35¾- —
tanks, works lb. .33 - —
Hexyl cinnamic aldehyde, dms lb. 3.95 - 4.00
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms. l.c.l., works lb. .76 - —
Hexyl salicylate, dms. lb. 1.70 - 1.75
Hexylene glycol, dms., c.l., dlvd lb. .17½- —
dms., l.c.l., dlvd. lb. .19 - —
tanks, dlvd lb. .15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd lb. 14.00 - —
dms. smaller lots, dlvd. lb. 14.50 - —
Homatropine hydrobromide, USP, bots. oz. 3.25 - —
methylbromide, USP, bots. oz. 3.00 - —
Hootmeal, 17-18% ammonia bulk, c.l., Chicago unit-ton. 6.75 - —
Horehound herb, bls. lb. .18 - .20
Hydrastis (see Goldenseal.)
Hydrazine hydrate, 85%, 240-lb. dms., c.l., works lb. 1.23 - —
240-lb. dms., l.c.l., works lb. 1.35 - 1.53
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works lb. 2.92 - —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1 lb. .29¼- —
dms., l.c.l., dlvd. zone 1 lb. .29¾- .30¼
tanks, dlvd. zone 1 lb. .27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.
Hydrobromic acid, medicinal, 48%, cbys., frt. equald lb. .46 - .56
Hydrochloric acid, anhyd. (see Hydrogen chloride.)
Hydrochloride acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 2.90 - 3.00
tanks, works, frt. equald ton. 28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.15 - —
20°, tanks, works, frt. equald ton. 30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald ton. 35.00 - —
Hydrochloric acid, CP, USP, consumers, cbys, extra, c.l., works lb. .15¾- —
cbys, l.c.l., same basis lb. .17¼- .17¾
5-pint bots., extra cs, c.l., same basis lb. .20¾- —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram. .85 - .90
Hydrocortsone alcohol, bulk, bots., kilo lots or more gram. 1.00 - 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pint bots., f.o.b. works, pint. .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal. dms., c.l., t.l., dlvd. 100 lbs. 17.25 - —
55-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs. 18.75 - —
30-gal. dms., c.l., t.l., dlvd. 100 lbs. 19.00 - —
20-gal., dms., l.c.l., l.t.l., dlvd. 100 lbs. 20.50 - —
tanks, works frt. equald. 100 lbs. 11.50 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.75 per cwt. for drum delivery.
Hydrofluosilicic acid, dms., works, 30% basis lb. .07 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
50-lb. cyls., l.c.l., works lb. .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls. l.c.l., works lb. .45 - —
Hydrogen cyanide, liq., 98%, tanks, works lb. .13 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .29 - .31
cyls., dlvd. W lb. .37 - —
tanks, works lb. .16 - —
Hydrogen peroxide, 35%, dms., c.l., dlvd lb. .202 - —
dms., l.c.l., dlvd. lb. .211 - —
tanks, dlvd lb. .1800- —
Hydroquinone, photo grade, dms., 50-lbs., f.o.b. works lb. 1.10 - —
Tech., dms., c.l., dlvd. lb. .82½- —
dms. l.c.l. dlvd lb. .84½- —
Hydroquinone monomethyl ether, dms., t.l., dlvd lb 2.59 - —
dms., l.t.l., dlvd. lb. 2.61 - —
Hydroxyacetic acid, tech., 70% dms. Philadelphia and Chicago lb. .11 - —
tanks Nelle W Va. lb .073 —
Hydroxycitronellal, cns. lb. 5.65 - 6.00
Hydroxyethyl cellulose, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point lb. .69 - —
fib. dms. 1,000 to 19,999-lb lots, same basis lb. .77 - —
Hydroxyethyl cellulose, fib., dms., 100 to 1,999-lb. lots, basis lb. .81 - —
fib. dms., smaller lots, same lb. 1.01 - —
Hyoscine salts (see Scopolamine).
Hyoscyamine hydrobromide, bots. oz. 7.75 - 8.50
Hyoscyamine sulfate, bots oz. 7.75 - 8.50
Hypophosphorous acid, purif., 50%, 10-chys. f.o.b works lb. 1.95 - —
NF 50%, 10-cbys., same basis lb. 1.35 - —

I

Ichthammol, NF, dms. lb. .75 - 1.05
Indigo (see Dyes, Coaltar, 1171 indigo, syn.).
Indole, CP, bots lb. 13.63 - 15.00
Inositol, 50-100 lb. dms., 1,000 lbs. or more, dlvd lb. 4.50 - —
50-lb. dms., less than 1,000 lb., dlvd lb. 4.75 - —
10 lb. cns., 10-50 lbs., dlvd. lb. 5.00 - —
5 lb. bots., dlvd. lb. 5.25 - —
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. lb. 1.10 - —
Resub., USP, dms., f.o.b. works lb. 2.20 - 2.22
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF, dms., 300-lbs., fo.b. works lb. 4.90 - —
dms., 100-lb., same basis lb. 5.05 - —
a-Ionone, cns. lb. 4.60 - 5.75
b-Ionone, cns. lb. 4.15 - 6.15
Ipecac root, whole, bgs. lb. 8.00 - 8.50
Powd., bbls., bxs lb. 9.50 - 10.00
Irish moss, bleached, prime, bls. lb. .35 - —
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .60 - —
bbls., l.c.l. ton lots, same basis lb. .61 - —
bbls., smaller lots, same basis lb. .62 - —
Dom., reg. bbls., c.l., dlvd. E lb. .55 - —
alkali-resistant, dom., reg., bbls., c.l., ton lots, same basis lb. .56 - —
bbls., l.c.l., smaller lots, same basis lb. .57 - —
Imp., British, reg., bbls. c.l., dlvd. E lb. .48 - —
bbls., l.c.l., ton lots, same basis lb. .49 - —
Iron blue, imp., British, reg., bbls., l.c.l., smaller lots, same basis lb. .50 - —
Iron blue dlvd. prices 1c higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05½- —
Iron oxide, Persian Gulf, red., bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, E. St. Louis, New York City lb. .14¼- —
Iron oxide, red nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., l.c.l. works lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l., ex dock lb. .06 Nom
bbls., l.c.l., ex whse. New York lb. 06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¾ 07
Peruvian type, bgs. c.l. lb .023 024
Iron oxide, yellow, pure, light lemon shade bgs c.l. works lb .12¼ -
other shades, same basis lb. .12 - .12½
Isoamyl alcohol, dms., c.l., works, frt. allo E lb .27½- —
Isoamyl alcohol, dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb 25 —
Isoborneol cns. lb 1.44 1.60
Isobornyl acetate, cns. lb 46 56
Isobornyl formate, dms. lb. 1.15 1.20
Isobornyl propionate, dms lb. 1.20 1.25
Isobutyl acetate, perfume grade cns lb. .30 - .35
Solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd lb. .13 - —
Isobutylene, 99% tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb. .75 - —

Isobutyraldehyde, tech., dms., c.l., divd. lb. .22 - —
dms., l.c.l., divd. lb. .23½- —
tanks, divd lb. .19½- —
Isobutyric acid, dms. c.l., t.l., divd. lb. .35 - —
dms., l.c.l., t.t.l. same basis lb. .36½- —
t.c. t.t., same basis lb. .33 - —
Isobutyronitrile, d.ns., c.l., divd. lb. .47½- —
dms., t.c.l., divd lb. .48½- —
tanks, divd lb. .45 - —
Isoeugenol, cns. lb. 3.10 - 3.40
Isoniazid, powd., bulk, 50 kilos kilo. 12.00 - —
Isonicotinic acid, 100-lb fib. dms., works lb. 4.25 • —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., divd. E. lb. .20½- —
dms., l.c.l., divd. E lb. .22 - —
tanks, divd. E lb. .18 - —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .16¼- —
Isophorone, dms., c.l., divd. lb. .25 - —
dms., l.c.l., divd. lb. .26½- —
tanks, divd. lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald. lb. .17 - —
dms., l.c.l., same basis lb. .18 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., divd. lb. .14 - —
dms., l.c.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —

Isopropyl alcohol, refd., 91%, dms., c.l., divd gal. .58 : —
dms., t.c.l., divd. gal. .68 : —
tanks, divd. gal. .42 - —
Isopropyl alcohol, 95%, c.l., dms., divd. gal. .60 • —
dms., t.c.l., divd. gal. .70 • —
tanks, divd. gal. .44 • —
Anhyd., c.l., divd. gal. .62 • —
dms., t.c.l., divd. gal. .72 • —
tanks, divd. gal. .46 • —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., divd. lb. .09½- —
dms., t.c.l., divd. lb. .11 - —
tanks, divd. lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l., t.l., works lb. 1.00 - —
dms., t.c.l., works lb. 1.05 - 1.25
tanks, works lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 • —
450-lb. fib. dms., t.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 1.25
Itaconic acid, refd., bgs. c.l., f.o.b. works lb. .39½- —
bgs., t.c.l., same basis lb. .41 - .43
Tech., bgs., c.l., same basis lb. .34½- —
bgs., 500-lbs. same basis lb. .36 • —

J

J acid, paste, bbls., works, 100% basis lb. 2.70 : —
Powd., bbls., same basis lb. 2.75 : —

Jalap root, NF, bls. lb. .85 • .90
NF, powd., bbls., bxs. lb. .65 • .70
Japan wax, cs. lb. .29 • .31
Juniper berries, bgs. lb. .25 • .30
Juniper berry oil, NF, bots. lb. 2.90 • 3.75
Twice rectified, bots. lb. 3.25 • —
Juniper tar oil, NF, dms. lb. .42 • .60
Juniper wood oil, tech., cns. lb. .38 • .55

K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. lb. .10 • .12
NF, colloidal 50-lb. bgs. lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bls lb. .48 • .50
No. 2, powd., bbls. lb. .43 • .45
No. 3, powd., bbls. lb. .37 • .40
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 • —
Kola nuts, bgs. lb. .11 • .12

L

L acid, bbls., works lb. 1.25 • —
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York gal. .20 • —
Group 3 gal. .15125- —
Houston, Texas gal. .16 • —
200°F-240°F b.r., tankcars, New Jersey or New York gal. .20 • —
Group 3 gal. .14125- —
Houston, Texas gal. .16 • —
Lactic acid, food processing, 50%, dms., c.l., t.l., divd. N.Y., Phila. lb. .1986- —
dms., 20 or more, same basis. lb. .2036- —

Lactic acid, food processing, dms., 5 to 19, same basis lb. .2086-
dms., 1 to 4, same basis lb. .2136-
80%, c.l., dms., same basis lb. .3336-
dms., 20 or more, same basis. lb. .3386-
dms., 5 to 19, same basis lb. .3436-
dms., 1 to 4, same basis lb. .3486-
Plastic grade, 50%, c.l., bbls., works lb. .2740-
bbls., 20 or more, works lb. .2790-
bbls., 5 to 19, works lb. .2840-
bbls., 1 to 4, works lb. .2890-
Lactic acid, plastic grade, 80%, bbls., c.l., works lb. .4625-
bbls., 5 to 19, works lb. .4725-
bbls., 1 to 4, works lb. .4775-
Tech., 44%, bbls., c.l., works. 100 lbs. 12.45 • —
bbls., t.c.l., works. 100 lbs. 12.85 • —
USP, 85%, cbys. lb. .85 • —
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 • —
bgs., 6,000-lb. lots, frt. equald lb. .14½- —
bgs., 2,000-lb. lots, frt. equald lb. .14¾- —
bgs., 200-lb. lots, frt. equald lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
ferment. grade, bgs., c.l., works. lb. .08¾- —
USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald lb. .22¼- —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c. to 1c. lower.
USP, spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., t.t.l., frt. equald lb. .19 - .19¼
Lady's slipper root, bls. lb. 3.00 - 3.50
Lamp black, bgs., c.l., works lb. .16 • .45
Lanolin, USP, anhyd., 400-lb. dms., works lb. .24 • .26
USP, annyd., cosmetic, 400-lb. dms., works lb. .26 • .30
USP, hydrous, 400-lb dms., works. lb. .20 • —
Lard, cash, dms., Chicago lb. .0795- —
Lard oil (see Grease oil).
Larkspur seed, bgs. lb. .55 • —
Laurel leaf oil, dms., cns. lb. 9.75 - 12.50
Laurent's acid, bbls lb. .87 • —
Lauric acid, pure, dms. lb. .30¼- .32¼
bags lb. .28¾- .31¼
tanks lb. .27¾- —
Lauryl alcohol, bots lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .65½- —
dms., t.t.l., works lb. .66 • —
Lavandin oil, 22-24%, dms. lb. 1.15 • —
Abrial, dms. lb. 1.20 • —
Lavender flowers, medium, bls. lb. .55 • .60
Ord., bls. lb. .20 • .25
Select., bls. lb. .90 • 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb. 1.85 • 4.00
40-42% ester, cns. lb. 3.50 • 3.65
Spike, Spanish, cns lb. 1.75 • 2.00
Lead acetate, NF, cryst., gran., powd., bbls lb. .34½- —
White, cryst., bbls. lb. .25½- —
gran., bbls. lb. .26½- —
powd., bbls. lb. .26½- —
Lead arsenate, acid powder, dealers, 3-50-lb. bgs. or any quantity, frt. alld. on $150 or more lb. .30½- —
1-lb bgs., same basis lb. .47 • —
Lead, blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .17 • —
bbls., l.c.l., same basis lb. .18 • —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, 400-lb. fib. dms lb. .56 • —
Lead iodide NF V jars lb. 3.82 • —
Lead linoleate, fused, 26.5% Pb, dms. lb. .38 • —
Lead metal, prime, pigs, New York. lb. .11 • —
St. Louis lb. .1080- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .1385- —
bgs., t.c.l., same basis lb. .1485- —
Lead naphthenate, liq., 16% Pb., dms., divd lb. .19½- —
24% Pb., dms., divd. lb. .24¼- —
Solid, 37% Pb., dms. divd lb. .31¾- —
Lead nitrate, tech., cryst., 400-lb. fib. dms lb. .2675- —
Lead orthosilicate gel., 50-60% PbO, dms., works lb. .29¾- .34¼
Lead peroxide, tech powd., bbls lb. .45 • .50
Lead phthalate dibasic, dms. works, lb. .41 • —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald. lb. .1375- —
bbls., t.c.l., same basis lb. .1475- —
95% Pb_3O_4 or less, bbls., same basis lb. .1395- —
bbls., t.c.l., same basis lb. .1495- —
98% Pb_3O_4, bbls., c.l., same basis lb. .1410- —
bbls., t.c.l., same basis lb. .1510- —
Lead, resinate, precip., 23% Pb, dms., lb. .49 • —
Lead salicylate, normal dms. works lb. .46 —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld lb. .20 • —
bgs., t.c.l., same basis lb. .21 • —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb, dms lb. .17¼- —
24% Pb, dms lb. .21¼- —
Solid, 30% Pb, dms lb. .26¾- —
Lead, white, basic carbonate, bgs., c.l., shipt pt., frt. alld lb. .18 • —
bgs., t.c.l., same basis lb. .19 • —
Basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .16½- —
bgs., t.c.l., same basis lb. .17½- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 • .15
non-ret. dms., t.c.l., same basis lb. .15 • .16
unbleached, non-ret., dms., c.l., same basis lb. .13 • .14
non-ret. dms., t.c.l., same basis lb. .14 • .15
Lemon bioflavonoid complex, 50 kilos, f.o.b. works kilo. 14.20 • —
Lemon oil, USP, Calif., cns., dms. lb. 2.45 • 3.75
Messina, cns lb. 4.00 • 6.50
Lemongrass oil, cns., dms lb. 3.00 • —
dl-Leucine, dms., 1 kilo, works kilo. 50.00 • —
Licorice root, gran., bls. lb. 13 • —
Powd., bls. lb. .15 • .16
Whole, bls. lb. .09 • .10
Lignaloe wood oil, Mexican, cns lb. 2.75 • 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate)
Lilac oil lb. 1,500.00
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs. works, E ton. 14.25 • —
Chemical, hydrated, bgs., c.l., same basis ton. 17.25 • —
spray, bgs., c.l. same basis ton. 18.25 —
For New York delivery, add $6.29 freight charge
Lime oil, dist., Mexican, dms. lb. 5.25 • 6.00
West Indian, dms. lb. 5.25 • 6.00
Expressed, West Indian, dms lb. 6.50 • 7.75
Lime salts (see Calcium).

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It's Exchange Lemon Oil U.S.P., California Cold Pressed. Here is lemon flavor as it should be—full of the aromatic pungency of California's best lemons. And it's uniform—the same, batch after batch. Only the Sunkist Growers, with the world's largest stocks of coastal, highland and desert-grown lemons at their command, could produce an oil with such consistent flavor balance.
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Sunkist Products Division Offices . . .
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400 West Madison Street, Chicago 6, Ill.
318 Cadiz Street, Dallas 7, Texas
Exchange

Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb. 3.45 - 4.28
Syn., 98-100%, dms., works lb. 3.20 - —
Linalyl acetate, ex bois de rose, 90-92%, dms lb. 2.65 - 4.50
96-98%, dms. lb 3.25 - —
Syn., 98-100%, dms., works lb. 3.20 - —
Lindane, 25% formulation, to distributors, dms. frt. alld. lb. 1.35 - 1.50
99%, tech. to formulators, 250-lb. dms., 5,000 lbs., dlvd lb. 2.13 - —
100-lb. dms., 5,000-lbs., dlvd.lb 2.15 - —
250-lb. dms., less than 5,000-lbs., dlvd lb. 2.18 - —
100-lb. dms., less than 5,000-lbs. dlvd lb. 2.20 - —
Linden flowers, with leaves, bls lb. .35 - .40
Without leaves bls. lb. .42 - .45
Linseed meal, expeller, 32%, bulk, Minneapolis, mills ton.60.50 - —
Extracted, 34%, bulk, same basis ton.54.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1880- —
dms, lc.l., New York lb. .2080- —
tanks, f.o.b. Minneapolis lb. .1520- —
tanks, New York lb. .1628- —
tankwabon, New York lb. .1653- —
Boiled linseed oil, .006c. per lb. higher.
Linseed oil acid, water white, dms lb. .2975- .31
Litharge, comi., powd. bbls., c.l., works, frt. equald lb. .1325- —
bbls., l.c.l., same basis lb. .1425- —
Lithium aluminum hydride, lump, dms., works lb.33.00 -39.00
Lithium benzoate, dms. lb. 1.65 - 1.67
Lithium bromide, NF, gran., bgs., works, frt. equald lb 2.60 - —
Lithium carbonate, NF, dms., ton lots lb. .58 - —
dms., 1,999 lbs. or less lb. .64 - —
Tech., dms., ton lots lb. .57 - —
dms., 1,999 lbs. or less lb. .63 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech. anhyd., dms., c.l., t.l., dlvd. or works, frt. alld lb. .87 - —
dms., l.c.l. same basis lb. .88 - .92
Lithium citrate, NF, dms. ton lots. lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb. 1.75 - —
bbls., ton lots and more, dlvd lb. 1.85 - —
bbls., less ton lots, dlvd lb. 1.90 - —
Lithium hydride, powd., dms., 500-lbs lots or more, works, lb. 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .54 - —
dms., l.c.l., frt. alld. lb. .58 - —
Lithium manganite, dms., works lb. .95 - 1.05
Lithium nitrate, tech., dms., 100-lb lots lb. 1.15 - 1.25
Lithium salicylate, dms. lb. 1.60 - 1.70
Lithium silicate, dms., works lb. 1.10 - 1.20
Lithium stearate, dms., c.l., works, lb. .47½- —
dms, ton lots, works lb. .48½- —
dms., less-ton lots, works lb. .53½- —
Lithium sulfate, dms., 100-lb. lots, lb. 1.15 - 1.25
Lithium titanate, dms., works lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. 1.03 - —
Lithol-rubine red toner, pure, bbls., works lb. 1.65 - —
Resinated, bbls., works lb. 1.47 - —
Lithopone, ord., bgs., c.l., dlvd. E, lb. .06¾- —
bgs., l.c.l., dlvd. E lb. .09½- —
Titanated (high-strength), bgs., c.l., dlvd. lb. .11 - —
bgs., l.c.l. dlvd. lb. .12 - —
Lobelia herb, bls lb. .80 - —
Lobeline sulfate, bots., 50-oz. lots, works oz.30.00 - —
Locust bean gum, powd., bgs. lb. .35 - .46
Lycododium, cs. lb. 2.50 - 3.00
l-Lysine monohydrochloride, 25-lb. dms. lb. 4.95 - —

M

Mace, Siauw, No. 1, bls. lb. 1.30 - 1.35
No. 2, whole, bls. lb. 1.20 - 1.25
siftings, bls. lb. 1.15 - —
Mace oil, dist., cns., dms. lb. 8.00 -10.00
Magnesia, calcined, tech., bgs., ctns., frt. equald lb. .25¾- .26½
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb .28¾- .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 - —
bgs., l.c.l., frt. equald lb. .28¾- —
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Lunning, Nev ton.39.50 - —
91%, bgs., c.l., same basis, ton.49.50 - —
95%, bgs., c.l. same basis, ton 59.00 - —
USP, light, bgs. lb. .36½- .37½
USP, heavy, bgs. lb. .36½- .37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton.86.25 - —
Deadburnt, standard grain, bulk, c.l., Chawelah, Wash. ton.46.00 - —
Magnesium bromide, 80-lb. dm., f.o.b. works lb. 1.15 - —
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l., frt. equald lb. .13½- .14
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .13½- —
bgs., t.l., frt. equald lb. .14 - —
bgs., l.c.l., frt. equald lb. .15 - 16
• Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15
hydrous, 99%, flake, bgs., c.l., works ton.60.00 - —
bgs., l.c.l., works ton.75.00 -100.00
Magnesium gluconate, 100-lb. dm., f.o.b. works, E lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b. works lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., t.l., frt. alld. lb. .23½- —
tanks, frt. alld. lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb .36 - —
pigs., 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs., works, same basis lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls. lb. .73 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb .10½- .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
bgs, l.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs., l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs., smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, powd., fib. dms., 5,000-lb. lots lb. .38 - —
fib. dms., 1,000-lb. lots lb. .40 - —
fib. dms., 100-lb. lots lb. .45 - —
USP, micronized powd., dms., 500-lb. lots lb. .65 - —
Malachite green, straight, PTA, bbls., works lb. 5.30 - —
Malathion, dms., c.l., works lb. .89 - —
dms., l.c.l., works lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride, dms., c.l., frt. equald lb. .24 - —
dms., l.c.l., frt. equald lb. .25½- —
tanks, frt equald lb. .22½- —
Maleic anhydride in bags ½c. per lb. less.
Malic acid, tech., dms lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots lb. 2.35 - —
dms., smaller lots lb. 2.40 - 2.50
Mandrake root, bls lb. .42 - .48
Manganese acetate, dms., dlvd lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton.148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis ton.144.50 - —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, dms. same basis ton.152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms lb. 1.84 - —
Manganese hydrate, dms., dlvd lb. .33 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms lb. .35¾- —
Solid, precip., 8.2% Mn, bbls lb. .41¼- —
Manganese metal, electrolytic, dms., c.l., dlvd. E lb. .34½- —
dms., ton lots, dlvd. E lb. .37 - —
dms., smaller lots, dlvd E lb. .39 - —
Manganese naphthenate, liq., 6% Mn, dms., frt alld lb. .29¾- —
Manganese resinate, fused, 3½% Mn, dms lb. .29¼- —
Precip., 6½-7% Mn., dms. lb. .42 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd. S., E ton.86.50 - —
bgs., t.c.l., dlvd S., E ton.93.50 - —
75%, $MnSo_4$, 30-tons, same basis 85.00- —
Manganese tallate, 6%, dms. lb. .26½- —
Manila copal gum, C, bgs lb. .35 - .38
DBB, bgs. lb. 24½ - 28
DK, dust, bgs. lb. .14 Nom.
MA, soft, bgs. lb .20 - .24
WS, bgs lb. No stocks.
Mannitol, com'l fib dms., ton lots, works lb. .60 - —
fib dms., to ton lots works lb. .62 - —
fib. dms., single dm. works lb .65 - —
Marine pitch, dms lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .26½- —
bgs., l.c.l., works lb. .28 - —
Menadione, USP bots. gram .044 .05
Menhaden oil crude, tanks, works, Atl. & Gulf ports lb. .05½- —
Menthol, nat USP, Brazilian large crystals, cs lb. 7.40 - 7.60
Nat., USP, Brazilian, regular crystals, cs lb. 7.30 - 7.50
Japanese, cs. lb.10.25 -10.50
Syn., USP, racemic, 25-lb. lots lb. 4.25 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs, fib. dms., less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld lb. .54 - —
bgs., fib dms. less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b works lb 4.03 - —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb. 3.78 - —

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Mercuric cyanide, NF VIII powd., fib dms lb 5.84 • —
Mercuric iodide, red, NF, 100-lb. dm. f.o.b. works lb 6.97 • —
Mercuric oxide red, NF IX 50-lb. dm. 100 lbs. f.o.b. works, lb 4.72 • —
tech. 50 lb dm. 100 lbs., same basis lb 4.52 • —
yellow, NF, 50-lb. dm., 100 lbs., same basis lb. 4.89 • —
tech., dms., 100 lbs. lb. 4.35 • —
25-lb. fib. dm. lb. 4.38 • —
Mercurous chloride (see Calomel).
Mercury, ammoniated (see White precipitate USP XV).
Mercury metal 76 lbs per flask net-flask 188.00 -190.00
Mesityl oxide dms. c.l., divd lb 15 —
dms. l.c.l. divd lb. 16½ —
tanks, divd lb 12½ —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb. .57 • .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4 Tolylenediamine).
Methacrylic acid, glacial 98%, dms. truckloads frt equald lb .42½ —
dms. smaller lots, frt equald, lb .43 - .75
tanks works frt equald lb. .40 - —
Methanol, nat, denaturing grade, tanks frt alld gal. .85 • —
Syn., zone 1, dms., c.l., or t.l. min divd gal. .51½- —
dms l.c.l. divd gal. .61½- —
Syn., tankwagon, 2,000-4,000 gal. lots, divd. Metropolitan area gal. .35 • —
tankwagon, 4,000 gal. min., divd gal. .30 • —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 • —
Syn., zone 2, dms., c.l., t.l., min., frt. alld. or divd. gal. .55½- —
dms l.c.l. works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., divd, Metropolitan area gal. .39 • —
tanks, 4,000 gal. min., divd. gal .34 —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b works, frt equald lb 21.75 • —
Methapyrilene hydrochloride, 100-999 lbs. dms., f.o.b works, frt equald lb 27.25 • —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms. t.l. frt alld lb 1.10 • —
dms., t.l., same basis lb 1.16 • —
dl-Methionine, fib dms., frt. alld., 50-lb or more lb 2.50 • —
Feed grade, 98% fib dms, same basis lb 1.43 • —
Methoxychlor 50% wettable powder, dealers, dms., cs lb. .66 • —
Methyl abietate, non-ref dms., c.l., divd zone 1 lb. .21½- —
non-ref dms., l.c.l., same basis lb. .22 .22½
Methyl abietate, hydrogenated, non-ref dms., c.l., divd zone 1 lb. .23½- —
non-ref dms., l.c.l., same basis, lb 24 24½
Zone 1 includes New England and Middle Atlantic states, Va., W Va., N C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S C and Tenn.
Methyl acetone, nat, dms., t.c.l., E of Miss. frt alld gal .62½- —
Syn., dms., c.l., frt. alld. E gal. .60½- —
dms., l.c.l., frt. alld. E gal. 70½- —
tanks, frt. alld. E. gal. .44½- —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., divd. lb. .35¼- —
dms., l.t.l., divd lb. .36¼- —
tanks, divd. lb. .32¼- —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., divd E lb. .17 • —
dms., t.c.l., divd E. lb. .18½- —
tanks, divd E lb. .14½- —
Methyl amyl alcohol, dms., c.l., divd. lb. .17 — —
dms., t.c.l., divd. lb. .18½- —
tanks, divd lb. .14½- —
Methyl amyl ketone, dms., c.l., t.l., f.o.b works lb. 1.99¼- —
dms., l.c.l., same basis lb. 2.00 • —
N-Methylaniline, tech., tanks, frt. alld lb .60 —
Methylanthranilate, cns. lb. 2.20 - 2.70
Methyl benzoate, cns, dms lb. .60 .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .72
on 100 lbs lb. .73 - .79
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .82 • —
50-lb bgs., 2,000-lb. lots and more, same basis lb. .89 • —
50-lb bgs., smaller lots, frt. alld on 100 lbs lb 1.05 • —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld lb. .69 • —
50-lb bgs., 2,000-lb. lots and more, same basis lb. .76 • —
50-lb bgs., smaller lots, frt. alld.
Methyl chloride, indust. cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Refrigerator mfgs., cyls., divd lb. .46¾- —
Other consumers or service men, cyls., divd lb 67¾ —
Methyl chloroform (see 1,1,1-Trichloroethane)
Methyl cinnamate, cns lb 1.55 1.80
Methyl ethyl ketone, dms., c.l., divd lb. .15 — —
dms., l.c.l., divd lb. .16½- —
tanks, divd lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 • —
dms., l.c.l., works lb. .45¾- —
tanks, works lb. .43 • —
Methyl formate, refd. dms lb. .35 .40
Tech. non-ref dms., any quantity works lb. .10 • —
tanks, works lb. .07 • —

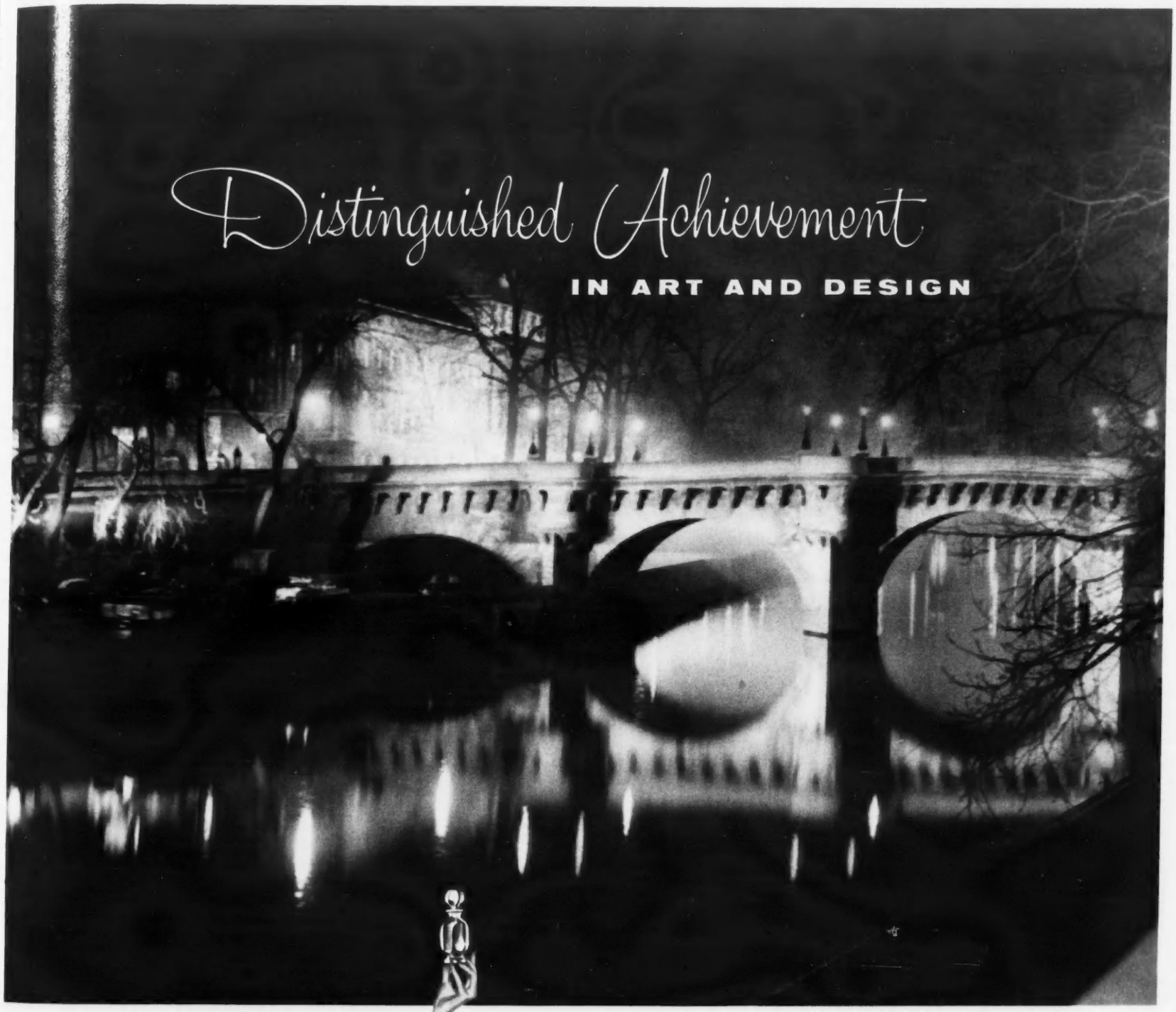
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .26 • —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works. lb. .27 • —
100-lb. multiwall paper bgs., l.t.l., works lb. .28 • —
Methyl heptin carbonate, bots. lb. 27.25 -29.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.85
Methyl isoamyl ketone, dms., c.l., divd lb. .20 - —
dms., l.c.l., divd. lb. .20½- —
tanks, divd. lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., divd lb. .17 - —
dms., l.c.l., divd lb. .18½- —
tanks, divd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W Va lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb. 2.45 - 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate)
Methyl parathion, tech., 80% dms., frt. alld E lb. .84 • —
Methyl parathion prices 2c. per lb higher in West
Methyl roseaniline chloride, NF., 5-lb. fib dms lb. 6.90 • —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼- —
dms., l.c.l., same basis lb. .62½- .67½
Methyl testosterone, USP, 100-gram. bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm lots or more, f.o.b. works lb 1.32 • —
5-39 dm lots, same basis lb. 1.37 • —
tanks, same basis lb. 1.27 • —
Methyl violet toner, molybdated, PMA, bbls., divd. E of Rockies lb. 2.95 • —
Tungstated, PTMA, bbls., same basis lb 4.35 • —
Methyl violet prices 1c. higher W of Rockies.
Methylene blue, NF, crystals, 100-lbs., frt. equald lb. 4.10 • —
Methylene chloride, tech., straight or assorted, dms., c.l. or t.l., divd lb. .12½- —
dms. l.c.l., t.l.l., divd lb. .15¾ —
tanks, 4,000-gal. min., divd lb. .11¼- —
b-Methylnaphthalene, 32° C., m.p., dms., works lb .90 —
Methylpentanediol (see Hexylene glycol)
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5)
Methylthionine chloride (see Methylene blue).
Mica, dry-grd, paint, plastic, 100 mesh, bgs., c.l., works lb. .04 —
roofing, 20 to 80 mesh, works lb. .03 • —
wet-grd., biotite, bgs., c.l., works, frt. alld E lb. .06½- —
bgs. l.c.l., ex-whse lb. .07¼- —
paint or facq., bgs., c.l., 325 mesh, works, frt alld E. lb. .08¼- —
bgs. l.c.l. ex-whse or freight alld. E lb. .09 - —
wet-grd., rubber, bgs., c.l., works, frt. alld E lb. .08 • —
bgs. l.c.l., ex-whse, or frt. alld E lb. .08¾- —
wallpaper bgs. c.l. works, frt. alld.E lb. .08¾- —
bgs. ex-whse or frt alld E. lb. .09 • —
white, 5-10 microns, bgs., c.l., works, frt alld E lb. .08¼ —
Mica, wet-grd W of Miss ½c. higher; W. of Rockies 1c higher
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 .12
Mineral black bgs, works lb. .0160- .0673
Mineral oil, white tech. 50-65 vis., non ref dms., c.l., f.o.b. refy gal. .70 • —
non-ref. dms., l.c.l., same basis gal. .75 • —
tankcars, refy. gal. .54 • —
65-75 vis., non-ref. dms., c.l., same basis gal. .70½- —
non-ref. dms., l.c.l., same basis gal. .75½- —
tankcars, refy. gal. .54½- —
NF, 80-90% vis., non-ref. dms., c.l., same basis gal. .71 • —
non-ref. dms., l.c.l., same basis gal. .76 • —
tankcars, refy. gal. .55 • —
135-138 vis., non-ref. dms., c.l., same basis gal. .77 • —
non-ref. dms., l.c.l., same basis gal. .82 • —
tankcars, refy. gal. .61 • —
145-155 vis., non-ref. dms., c.l., same basis gal. .83 • —
non-ref. dms., l.c.l., same basis gal. .88 • —
tankcars, refy. gal. .67 • —
Mineral oil, USP, 180-190 vis., non-ref. dms., c.l., same basis, gal. .85 • —
non-ref. dms., l.c.l., same basis. gal. .90 • —
tankcars, same basis gal. .69 • —
200-210 vis., non-ref. dms., c.l., f.o.b. refy gal. .875 .90
non-ref. dms., l.c.l., same basis gal. .925 —
tankcars, refy. gal. .69 - .715
USP, 340-350 vis., non-ref. dms., c.l., f.o.b. refy gal. .92½- —
non-ref. dms., l.c.l. gal. .97½- —
tankcars, refy. gal. 76½- —
(For dlvd. N.Y. prices add 2c. for c.l. and 3c. for l.c.l.).
Mineral orange, American, bbls., c.l., works lb. .16 • —
bbls., l.c.l., same basis lb. .17 • —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 • —
New York gal. .305 • —
Houston, Texas gal. .25 • —
regular, tankcars, New Jersey and New York gal. .18 • —
Group 3 gal. .12875- —
Houston, Texas gal. .145 — —
140 F. flash, New York, New Jersey at terminal gal. .205 • —
Houston, Texas gal. .17 • —
Mink oil, dms. lb. 1.75 • —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lo 6.30 • —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .13½- .14
tanks, New York gal. .15½- .16
Molybdated orange bbls. lb. .49 —

Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 • —
325 mesh, ctns., works kilo. 9.13 • —
Molybdenum trioxide, purif., dms., works lb. 1.35 • —
Tech., chemical, dms., works, basis Mo content lb. 1.61 • —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.60 • —
Molybdic acid, 84%, dms., works. lb. 1.15 - 1.25
Monoallylamine, dms., c.l., divd lb. .965 • —
dms., c.l., divd. lb. .995 • —
tanks, divd. lb. .96 • —
Monobutylamine, dms., c.l., divd. E. of Rockies lb. .57½- —
dms., t.c.l., same basis lb. .59 • —
tanks, same basis lb. .55 • —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 • —
dms., t.c.l., works lb. .56 • —
tanks, works lb. .54 • —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or divd. E lb. .10½- —
dms., t.c.l., same basis lb. .11½- —
tanks, same basis lb. .08¾- —
Monochlorobenzene prices in the West 1¾c. higher.
Monoethanolamine, dms. c.l., divd. E lb. .27½- —
dms., t.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 • —
Monoethylalphanaphthylamine (see n-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous, solution, dms., c.l., divd. E, 100% basis lb. .38½- —
Monoethylamine, 70%, aqueous solution, dms., t.c.l., divd. E., 100% basis lb. .40 • —
tanks, divd. E., 100% basis lb. .35 • —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine)
Monoisopropanolamine, dms., c.l., divd. E lb. .27½- —
dms., t.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 • —
Monoisopropylamine, anhyd., dms., c.l., divd lb. .33½- —
dms., t.c.l., same basis lb. .35 • —
tanks, same basis lb. .31 • —
Monomethylamine, anhyd., cyls., t.c.l., frt. equald., 100% basis lb. .30 • —
tanks, 100% basis lb. .26 • —
30-35% soln., dms., c.l., frt. equald. 100% basis lb. .36 • —
30-35% soln., dms., t.c.l. frt. equald, 100% basis lb. .36½- —
tanks, frt equald., 100% basis, lb. .26 • —
40% soln., dms. frt. equald., 100% basis lb. .33 • —
dms., t.c.l., frt. equald., 100% basis lb. .33½- —
tanks, frt. equald, 100% basis lb. .26 • —
Monopentaerythritol, tech. bgs., c.l., divd lb. .29 • —
bgs., l.c.l. lb. .30 • —
Monopotassium glutamate, dms., 1,000-lb lots, frt alld lb 3.05 • —
dms, 100-lb lots, same basis lb 3.25 • —
Monosodium glutamate, dms., divd. lb. 1.02 - 1.07
Monosodium phosphate (see sodium phosphate monobasic)
Montan wax, Calif., refd., bgs. lb. .29 • .30
imp., crude, Bohemian, bgs. lb. .25 • .26
German, bgs. lb. .25 • .26
Morphine, cns., 100-oz., f.o.b. works. oz. 12.35 • —
Morphine hydrobromide, cns., 100-oz., f.o.b. works oz. 9.90 • —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b works oz. 9.90 • —
Morphine sulfate, USP, cns., 100-oz., f.o.b works oz. 9.90 • —
Morpholine, dms., c.l., divd. E lb. .55¼- —
dms., l.c.l., divd. E lb. .56¾- —
tanks, divd E lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb lots lb. 4.40 - 4.90
cns., 25-lb lots lb. 4.50 - 5.00
Ketone fib. dms., 100-lb lots lb. 4.60 - 5.10
cns., 25-lb. lots lb. 4.70 - 5.20
Xylol, fib. dms., 100-lb lots lb. 1.26 • —
cns., 25-lb lots lb. 1.40 • —
Mustard seed, Danish, yellow, bgs. lb. .09 • .09½
Montana, yellow, bgs lb. .10½- —
Oriental, bgs. lb. .09 - —
Mustard, oil, syn., bots. lb. 1.60 - 1.85
Myristic acid, bgs. lb. .23¾- .25¾
tanks lb. .22¼- —
Myrrh gum, cs. lb. .65 • .75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha)
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York gal. .19 • —
Group 3 gal. .13875- —
Houston, Texas gal. .155 • —
Naphthalene, crude, dom., 78°, tanks, f.o.b., frt. equald lb. .06¼- .06½
Refd., indust., chipped, crushed, bgs., frt. equald lb. .14½- —
tanks, same basis lb. .11¾- —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers., bbls., c.l., same basis lb. .15½- —
cs., 50 lbs. c.l., same basis. lb. .15¾- —
1-lb pkgs. c.l., same basis. lb. 18½- —
a-Naphthol, dms., frt. alld lb. 1.02 • —
b-Naphthol, tech. flake, bbls., c.l., works lb. .34 • —
bbls. l.c.l. works lb. .36 • —
Naphthol ITR red toner, bbls., works lb 5.00 • —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid)
1-Naphthol-5-sulfonic acid (see L acid)
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid)
a-Naphthylamine, dms, frt. alld lb. .52 • —
b-Naphthylamine tech. flake, bbls., works lb. 1.60 • —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid)
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid)
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib. dms. lb. 8.50 • —

Neatsfoot oil, 15° cold test, dms lb. .29 Nom.
20° cold test, dms. lb. .28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .18 • —
fib. dms., 100-999-gram lots, basis activity gram. .25 • —
Tech., fib. dms. gram. .13¼- —
Neopentylglycol, dms., c.l., divd lb. .32 • —
dms., t.c.l., same basis lb. .33 • —
Nerol, dms. lb. 4.75 • —
Neroli oil, NF, French, bots. lb. 425.00 -575.00
Tunisian, bots. lb. 400.00 • —
Nerolin, cns. lb. 2.45 - 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.50 • —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., divd. lb. .72 • .79
Nickel carbonate, bbls., divd. lb. .83 • .90
Nickel chloride, bbls., divd. lb. .39½- .47¼
Nickel formate, bbls., ton lots, frt. alld lb. .78 • .79
Nickel metal, electro cathodes, cs., works lb. .81¼- —
Nickel nitrate, dms., frt. alld. lb. .34½- .36¼
Nickel oxide, black, bbls. lb. .92 • —
Green, bbls. lb. .91 • —
Nickel sulfate, bgs., c.l., divd. lb. .30 • —
bgs., l.c.l., divd. lb. .30¼- .38
Nicotinamide, USP, 50-kilo, dms., frt. equald kilo. 5.75 • —
dms., smaller lots, same basis. kilo. 5.85 - 6.05
Nicotinamide hydrochloride, 50-kilo dms., divd kilo. 6.50 - 7.50
Nicotine sulfate 40%, dealers, 50-lb. dms. frt. alld lb. 1.20 • —
40% manufacturers, 500-lb. dms., frt. alld lb 1.05 • —
Nicotinic amide, USP (see Nicotinamide)
Niger seed, bgs. lb. 10¼- —
Nikethamide, cbys. lb. 5.00 • —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs. 5.75 • —
cbys., t.c.l., works E 100 lbs. 6.05 - 6.85
38° Be., cbys., c.l., works E. 100 lbs. 6.25 • —
cbys., t.c.l., works E 100 lbs 6.55 - 7.35
40° Be., cbys., c.l., works E 100 lbs. 6.75 • —
cbys., t.c.l., works E 100 lbs. 7.05 - 7.85
42° Be., cbys., c.l., works E. 100 lbs. 7.25 • —
cbys., t.c.l., works E 100 lbs. 7.55 - 8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis 100 lbs. 3.90 • —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 • —
Nitric acid, CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
cbys. extra, t.c.l., works. lb. .20 • —
5-pint bots., extra, cs., c.l., same basis lb. .22½- —
5-pint bots., extra, cs., t.c.l., same basis lb. .24 - .25
dms., frt alld lb. .99 • —
4-Nitro-2-aminophenol, tech., paste, dms., t.c.l., works lb. .64 • —
m-Nitroaniline, cryst., dms., frt. alld lb 1.15 • —
Paste, dms., frt. alld., 100% basis. 1.10 • —
o-Nitroaniline, flaked, dms. t.l., frt. alld lb. .49 • —
dms. t.l., frt alld lb. .51 • —
o-Nitroaniline orange toner, kgs. 1.50 • —
p-Nitroaniline, c.l., t.l., dms., 20,000 lb. min., divd lb. .44½- —
dms., t.c.l., same basis lb. .46½- —
o-Nitroanisole, tech., tanks, frt alld. lb. .36 • —
p-Nitroanisole, tech., solid, dms., frt alld lb. .72 • —
Nitrobenzene, dbl dist., dms., c.l., frt. alld lb. .13 — —
dms., t.c.l., frt. alld. lb. .14 • —
tanks, frt. alld lb. .12 • —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 • —
Nitrocellulose, ester-soluble, 30-35 cps., ¼ ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .39½- —
bbls., l.c.l., same basis lb. .42½- —
18-25 cps., bbls., c.l., same basis. lb. .41½- —
bbls., l.c.l., same basis lb. .44½- —
250-400, 600-1,000 seconds, bbls., l.c.l., same basis lb. .44½- .47¼
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis lb. .44 • —
bbls., l.c.l., same basis lb. .47 • —
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .43 • —
bbls., l.c.l., same basis lb. .46 • —
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .15 • —
dms., t.c.l., same basis lb. .16 • —
tanks, same basis lb. .13 • —
p-Nitrochlorobenzene, dms. lb. .26 • .27
2-Nitro-p-cresol, tech., dms., t.l lb. .71 • —
dms., t.l.l. lb. .73 • —
Nitroethane, dms., c.l., divd. E lb. .28½- —
dms., t.c.l., divd. E lb. .30 • —
tanks, divd E lb. .26 • —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, direct application, tanks, f.o.b. works unit-ton. 1.64 • —
Manufacturing type, same basis, unit-ton. 1.26 • —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 • —
Cyls., t.l., min. 5 tons, same basis lb. .071⅛- —
Cyls., t.c.l., t.l.l., same basis lb. .15 • —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 - 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago works. unit-ton. 3.50 - —
(The foregoing price is per unit NH_3, plus 50c. per unit a.p.a., bulk, f.o.b. producers' works, Chicago.)
Nitromethane, dms., t.l., divd. E lb. .26 • —
dms., l.t.l., divd. E lb. .27½- —
Nitromethane prices West of Rockies are 1c higher
a-Nitronaphthalene, bbls., frt. alld. lb. .31 • —
o-Nitrophenol, dms., works, frt. equald lb. .94 • —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 • —
dms. t.c.l. frt. alld lb. .47 • —
1-Nitropropane, dms., c.l., frt. alld, E. of Rockies lb. .28½- —
dms., t.c.l., same basis lb. .30 • —
tanks, same basis lb. .26 • —
1-Nitropropane prices West of Rockies are 1c per lb higher.
2-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .18½- —
dms., t.c.l., same basis lb. .20 • —
tanks, same basis lb. .16 • —
m-Nitrotoluene, tech., dms. frt. alld. lb. .50 • —
o-Nitrotoluene, dms., c.l., frt. alld lb. .15 • —
dms. t.c.l., frt alld. lb. .16 • —
tanks, frt. alld. lb. .13 • —



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521 West 57th St. • New York 19, N. Y.

Creators and Manufacturers of Flavors, Fragrances and Aromatic Chemicals

ARGENTINA AUSTRIA BELGIUM BRAZIL CANADA ENGLAND FRANCE GERMANY HOLLAND ITALY NORWAY SOUTH AFRICA SWEDEN SWITZERLAND U.S.A.

p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms., l.c.l., works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms., l.c.l., works lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms., c.l, frt. alld. lb. .22½- —
dms., l.c.l., frt. alld lb. .23½- —
tanks, frt. alld lb. .20 — —
Nonylphenol prices on shipments to Western States are 2c. higher.
Noscapine, cns. oz. 8.00 - —
Nutmegs East Indian, whole, bgs. lb. 1.20 - —
West Indian, bgs. lb. .98 - .99
Nutmeg oil USP dist., East Indian, cns. lb. 8.00 -12.00
West Indian, cns. lb 9.00 -12.00
Nux vomica, bls. lb. .20 — —
Powd., bbls., bxs. lb. .20 — .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms. lb. .44 - .47
Octane, indust., tanks, Bayonne, N.J gal. .20 - —
1-Octanol, tech., dms. c.l., dlvd., Zone 1 lb. .41½- —
dms., l.c.l., dlvd. Zone 1 lb. .43½- .44½
tanks, dlvd. Zone 1 lb. .37½- —
Octyl alcohol, perfumers grade, bots. lb. 1.60 3.25
Octyl alcohol, tech. (see 1-Octanol, tech)
n-Octyl-decyl alcohol blend, tanks, dlvd lb. .19 - —
tert-Octylamine dms., c.l., t.l., f.o.b. works lb. .54½- —
dms l.c.l. same basis lb. 55 - —
Octylphenol, bgs., c.l., works lb. .22½- —
bgs., l.c.l. works lb. .23 - —
tanks, works lb .21½- —
Octylphenol in dms., 1lc. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liquid, dms. lb. .16 - .16¼
tanks lb. .14¼- .14½
Oleic acid, dbl.-dist. (white), dms. lb. .18½- .21
tanks lb. .16 - —
S. D., dms. lb. .17½- .20
tanks lb. .15 - —
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 .20
Tears, cs. lb. .22 .30
Olibanum oil, bots lb. 5.00 7.65
Extra fine bots lb 8.00 9.50
Olive oil, edible, dms., spot, ex whse. gal. 2.40 - 2.45
Olivine, crude, works ton 12.00 - —
20 mesh, works ton 15.00 - —
100 mesh, works ton 20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz 19.20 - —
gran., cns., 50 lbs., same basis oz 21.65 - —
powd. cns. 50 lbs. same basis, oz 21.65 - —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 - .90
Calif., sweet., cns., dms lb. .60 - —
Florida, cns., dms lb .0 - 45
Messina, cns. lb. 3.25 5.00
West Indian, bitter, cns., dms lb. 2.50 - 3.50
Orange peel, bitter, Haitian, bls lb. .18 .20
Sweet lb. .28 .30

ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns. lb. 1.80 2.30
Orris root, Florentine, bls lb. .55 - —
powd., bbls., bxs lb. .65 - —
Verona, bls lb. .35 - —
powd bbls., bxs lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid)
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol)
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline)
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine).
Ouabain, USP bots. gram 3.00 - 4.00
Ouricury, wax, crude, bgs lb. .50 - .52
Refd., pure, bgs lb. .54 - .56
Oxalic acid, bgs., c.l., works lb. .18 - —
bgs., 10,000-lb. lots, works lb. .19 - —
bgs., smaller lots, works lb. .20½- —
Oxalic acid in drums is priced ½c. per lb higher.
b-Oxynaphthoic acid, pigment manufacture, dms., frt. alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb 1.03 - 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb 4.75 5.00
cns., smaller lots, works lb 4.92 5.17

P

Palm oil, clarif., dms lb. .14¾- .15¾
tanks, New York lb. .12 - —
Palm oil acid, double dist. dms. lb. .16½- .19
tanks lb. .14 - —
single dist., dms. lb. .16 - .18½
tanks lb. .13½- —
Palmarosa oil, cns. lb. 5.25 - 6.50
Papain, powd., bots. lb. 3.25 -10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns oz 7.10 - 7.35
Paprika, Bulgarian, bgs lb. .32 - —
Hungarian, bgs. lb. .33 - —
Spanish, bgs. lb. .33 - .38
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid)
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls lb. 1.30 - —
Chlorinated, kgs. lb. 1.41 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM tanks, refy. lb. .0655- .0660
Fully refd., 122°-124°F., ASTM, lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
132°-134° F., ASTM, tanks, refy. 135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F higher than ASTM.
Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy gal. .17½- —
Paraffin wax (see Paraffin)
Paraformaldehyde 91% flake, bgs., c.l., frt. alld lb. .10 —
bgs., l.c.l., frt. alld lb. .12 .13
91% powd., bgs., c.l. ex whse. lb. .1715- —
bgs., l.c.l., ex whse lb. .1865- —
USP-X, fib. dms., c.l. f.o.b., works lb. .19 - —
fib. dms., 1,000-lb. lots, same basis lb. .20 - —
fib. dms., smaller lots, same basis lb. .21½- —
Paraldehyde tech., 98%, 55-gal. dms., t.l., dlvd. E lb. .14 - —
55-gal. dms., l.c.l., dlvd. E lb. .15½- —
tanks, dlvd. E lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion ethyl dms. frt. alld lb. .84 —
Parathion prices 2c per lb higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide)
Passion flower herb bls lb .25 .40
Patchouli oil, imp., cns. lb. 5.00 - 5.60
Peach kernel oil USP (see Apricot kernel oil)
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd E of Rockies lb 1.00 —
Peacock blue price 1c higher W of Rockies.
Peanut meal, old process, 45%, bgs., f.o.b. mills ton 62.00 - —
solvent, same basis ton 60.00 - —
Peanut oil crude tanks, f.o.b. mills lb. .13 - —
Refd., dms. lb. .23¼- .23½
tanks lb. .21¼- —
Pectin, dms., NF, citrus, powd., 100 kilos, f.o.b. shipt pt kilo 4.52 —
Pelargonic acid, dms., c.l., dlvd. E lb. .27½- —
ton lots, same basis lb. .23½- —
tanks, same basis lb. .25 - —
Penicillin potassium, cryst., bulk, 1,000,000 units .018 - —
Penicillin procaine cryst., bulk, 1,000,000 units .020 - —
Pennyroyal oil USP imported, cns. lb. 2.35 - 2.80
Pentachlorophenol, 50-lb. bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., less than ton lots, same basis, lb .29 - —
bgs., c.l., t.l., 2,000 lb. minimum, same basis lb. .22½- —
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol tech., bgs., c.l., dlvd lb. .29 - —
bgs., l.c.l., dlvd lb. .30 - —
Pentaerythritol, di and tri-isomers (see Dipentaerythritol and Tripentaerythritol)
Pentane, indust. tanks, Tex refy. gal. .14 - —
Pentobarbital, dms. 100 lbs. or more lb. 6.00 —
Pepper, black, Malabar, bgs lb. .45½- —
Lampong, bgs. lb. .45 - —
Red, Funtuas, bgs. lb. .30 - .31
Japanese, Hontoka, bgs lb. .40 - —
Santaka, bgs. lb. .30 - .31
Sudanese, bgs. lb. .52 - .56
White, Muntok, bgs lb. .52 - —
Peppermint leaves, dom., USP, bls., dms lb. No stocks
imp., USP dms lb. .85 - .90
Peppermint oil, nat., dms lb. 4.00 - 4.40
Redist., USP, dms lb. 4.25 - 4.65
Perchloroethylene dms. c.l., or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd. lb. .15¼- —
tanks, dlvd lb. .11¾- —
tanktruck 1,000 gal. min dlvd lb 12¼- —
Peri acid, dry bbls., frt. alld lb. 1.60 —
Paste, bbls. frt. alld lb 1.55 —
Peru balsam, dms lb 1.15 - 1.50
Persic oil USP (see Apricot kernel oil).
Petitgrain oil South American, cns. dms lb. 2.43 - —
Petrolatum, NF, cream, dms., c.l., refy lb. .085 .08625
dms., l.c.l., dlvd lb. .11125-.11250
tanks, refy lb. .0625 .06375
NF, extra amber, dms., c.l., refy. lb. .07625- —
dms., l.c.l., dlvd lb. .1025- —
tanks, refy. lb. .07625- —
NF, soft yellow, dms., c.l., refy lb. .07625- —
dms., l.c.l., dlvd. lb. .1025- —
tanks, refy. lb. .05375- —
USP, lily white, dms., c.l., refy lb .09125-.09675
dms., l.c.l., dlvd lb. .1175- .1225
tanks, refy. lb. 0 .375 —
USP, snow white, dms., c.l., refy. .09625- —
dms., l.c.l., dlvd. lb. .1225- —
tanks, refy. lb. .07375- —
Full tankwagons of petrolatum are ¼c. more per lb. than tankcars.
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS

Petroleum product quotations are listed individually. For example, prices on Petroleum mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ref. dms., c.l., works lb. .16½- .18¾
non-ref. dms., t.c.l., works lb. .17½ .19
tanks, works lb. .14½ .17
50-55% sulfuric content, non-ref. dms., c.l., works lb. .16 - —
non-ref. dms., t.c.l., works lb. 17 - —
tanks, works lb. .13 - —
o-Phenetidine dms., c.l., frt. alld. E lb 91 - —
dms., t.c.l., same basis lb. 93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms. same basis lb. 1.08 - —
Phenobarbital, USP, dms., 100-lbs., frt. alld. lb. 2.85 - 3.25
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld E. of Rockies lb. .16½- —
non-ret. dms., t.c.l., same basis. lb. .17½- —
tanks, same basis lb. .14½- —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .16¼- —
non-ret. dms., t.c.l., same basis. lb. .17¼- —
tanks, same basis ¾lb. .14¼- —
39°C., or above, tar dist., non-ret. dms., c.l., same basis lb. .17¾- —
non-ret. dms., t.c.l. lb. .18¾- —
tanks, same basis lb. .15¾- —
Phenol, USP, syn., dms., c.l., t.l., frt. alld. lb. .18¼- —
dms., l.c.l., same basis lb. .20¼- —
tanks, same basis lb. .16¼- —
Phenolphthalein, USP or yellow, 250-lb dm., 2,000 lbs., frt. alld lb. 1.30 - —
250-lb dm., same basis lb 1.35 - —
Phenothiazine drench fib dms., t.l., dlvd lb. .46 - —
fib dms., ton lots, dlvd lb. .49 - —
NF, fib dms., t.l., dlvd lb. .45 - —
fib dms., ton lots, dlvd lb. .48 - —
Phenyl acetate, dms. 100-lb. lots, works lb .50 - —
Phenyl salicylate (see Salol)
Phenylacetaldehyde, soln., 50% bots lb. 2.15 2.35
100% bots. lb 3.80 4.00
Phenylacetic acid, pure, cryst., cns lb 1.25 1.75
di-Phenylalanine, dms., 1-kilo kilo. 65.00 - —
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms., 200-lb lots, dlvd E lb 3.45 - —
fib dms. smaller lots, dlvd E lb 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd E lb .50 - —
dms., l.c.l., dlvd. E lb. .51½- —
tanks, dlvd. E lb. .47½- —
m-Phenylenediamine dms., c.l., t.l., frt. alld lb 1.06 - —
t.c.l., t.t.l. same basis lb 1.10 - —
o-Phenylenediamine, comi. fib dms. 100 to 1,000 lbs., works lb 1.70 1.80
p-Phenylenediamine tech., dms, works lb 1.55 —
Phenylethanolamine, dms., c.l., works lb. 75½ - —
dms., t.c.l., same basis lb. .76¼ - —
Phenylethyl acetate bots. lb 1.25 1.40
2-Phenylethyl alcohol extra dms lb 1.14 1.50
Standard dms lb 1.10 1.60
b-Phenylethylamine dms. 20,000 lbs or more, frt alld lb 1.50 —
dms smaller lots frt alld lb 1.70 1.85
Phenylethylphenyl acetate bots lb 4.00 4.25
Phenylglyconic acid (see Mendelic acid)
Phenylhydrazine 97% 450-lb dms. lb 1.45 —
1-Phenyl-3-methyl pyrazolone-5 fib dms., 250-lb lots, dlvd E 1.80 - —
fib dms. smaller lots, dlvd E lb 2.10 —
o-Phenylphenol dms. t.c.l. works lb 48 .50
p-Phenylphenol, bgs. c.l. works lb .38½- —
bgs t.c.l., works lb .43 - —
Philippine copal gum, pale, chips, bgs b. .23¼ .27
nubs, bgs. lb. .33¼ .37
seeds bgs. lb. .20 Nom.
sorts, bgs. lb 20 .24
Phlorogluemol coml., fib dms works lb 6.40 - —
CP bots., works lb 17.75 - —
Tech fib dms works lb 6.00 - —
Phloxin red toner (see Eosin red toner)
Phosgene ref cyls works lb 15½- —
Phosphate defluorinated (see under D)
Phosphate rock, Curacao, Atlantic ports New Orleans ton 6.50 - —
Phosphate rock, Florida, land pebble run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines short-ton 4.989 5.398
68-70%, b.p.l., bulk, c.l., same basis short-ton 5.849 5.858
70-72%, b.p.l., bulk, c.l., same basis short-ton 6.429 6.438
74-75%, b.p.l., bulk, c.l., same basis short-ton 7.329 7.338
76-77%, b.p.l., c.l., bulk, same basis short-ton 8.219 8.228
Above Florida prices are based on fuel oil at 2.52 per bbl and labor at $1.64
Phosphoric acid, food grade, 75%, chys. c.l. works, f.o.b., frt. equald 100 lbs 7.00 —
chys. t.c.l., same basis 100 lbs 7.25 7.75
tanks, t.w., works 100 lbs 5.60 —
80% chys. c.l. frt equald 100 lbs 7.85 —
chys. t.c.l., works 100 lbs 8.10 9.35
tanks, t.w., works 100 lbs 6.00 —
NF 85% chys., c.l., works 100 lbs 8.50 —
chys., t.c.l., works 100 lbs 8.75 9.00
tanks, t.w., works 100 lbs 6.65 —
Phosphorus, amorph., red, dms., t.l., works lb .55 —
dms smaller lots, works lb .56 .57
white (yellow), solid dms, c.l., works, frt. equald lb. .20 .20½
dms, t.c.l. works, frt. equald lb. .21½ —
tanks, works, frt equald, lb. .19 —
Phosphorus oxychloride, dms, c.l., works lb. .14 - —
dms, t.c.l., works lb. .15 - —
tanks works frt equald lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½- —
dms t.c.l. works lb. .14½- .15½
Solid, dms, c.l. works lb. .11½- —
dms t.c.l. works lb. .12½- .13½
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms t.c.l. works lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 —
dms. t.c.l. works lb .39 .40
Phosphorus trichloride, dms., c.l., works lb. .14 —
dms., t.c.l., works lb .15 —
tanks, works lb .12½- —
Phthalic anhydride bgs, c.l., works, frt. equald lb. .18 - —
bgs., t.c.l., same basis lb. .19 - —
tanks, same basis lb. .17½- —
Phthalimide 97-98%, dms., frt. alld lb .65 - —
Phthalocyanine blue, full strength, bbls, dlvd E of Rockies lb 2.90 - —
Resinated bbls, same basis lb 2.75 - —
Water dispersable, bbls., same basis lb 1.52 —
Phthalocyanine blue prices 1c. higher W of Rockies.
Phthalocyanine green toner, bbls., works lb 3.35 - —
Resinated, bbls. lb 3.00 - —
Water dispersable, bbls. lb 1.71 —
Phthalocyanine green prices 1c higher W of Rockies.
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more lb 5.00 —
NF, fib. dms. lb 5.20 —
a-Picoline, dms. c.l., works, frt. equald lb. .46 .48
dms., l.c.l., same basis lb. .45½- .49
tanks, same basis lb. .43 .46
b-Picoline, 98% dms., t.l., works lb 1.05 —
dms., t.c.l., same basis lb 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline, 5°C. dms., c.l., works, lb. .32½- —
dms., t.c.l., works lb .33 - —
g-Picoline, dms., f.o.b., works lb 1.60 - —
tanks, t.l., same basis lb 1.50 - —
Picric acid, NF bbls. lb .85 - —
Tech., bbls. lb .50 - —
Pigment green B, kgs lb 1.55 - —
Pilocarpine hydrochloride, USP, bots oz 4.75 - 5.25
Pilocarpine nitrate, USP bots., vials oz 4.65 5.15
Pimento, Jamaican, bgs. lb. .69 - .72
Mexican, bgs. lb. .61 - —
Pimento berry oil, NF, dms. lb 3.75 9.25
Pimento leaf oil, crude, cns lb 2.50 - 2.60
Pine oil, dest.-dist., dms., t.c.l. works lb. .15 - —
dms. t.c.l. ex whse New York lb. .173 —
Steam-dist. dms. ex whse New York lb .185 —
dms., dlvd lb 188 —
Pineneedle oil, Siberian (see Abie[illegible] oil).
Pink root, bls. lb 2.25 - —
Piperazine anhyd. dms. c.l., frt alld E lb 1.80 - —
dms., t.c.l., frt alld E lb 1.85 - —
Piperazine citrate, 36% dms., 1,000 lbs. or more, frt alld lb 1.33 - —
Piperazine dihydrochloride 51%, dms. 1,000 lbs or more frt alld lb 1.29 - —
Piperazine hexahydrate 44% dms., 1,000 lbs. or more, frt alld lb .90 - —
dms., 200-900 lbs., frt alld lb. .93 - —
Piperazine phosphate, 42% dms., 1,000 lbs or more, frt. alld lb. 1.11 - —
Piperidine, dist., 98% min., dms or more, t.c.l., t.t.l., f.o.b. works lb 2.65 - —
1-4 dms., same basis lb — —
dms., c.l., t.l., frt. equald lb 2.55 — —
Piperonyl butoxide dms. dlvd E lb 4.50 5.05

PITCHES

Pitch quotations are listed individually. For example, prices on Pitch, coaltar, may be found in the C's under Coaltar pitch.

Platinum metal, works oz 81.00 -85.00
Pleurisy root, bls lb 45 .50
Podophyllum resin, NF, dms lb 12.50 -15.50
Poke root, bls. lb .19 .22
Polymyxin, bots., bulk., 50 billion units or more 1,000,000 units. .52 —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 —
Polyoxyethylene sorbitan monostearate, dms. 20,000-lb. lots, works lb. 42 - —
dms. 10,000-20,000-lb lots, works lb 44 —
dms smaller lots, works lb 47 .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb lots, works lb 42 - —
dms. 10,000-20,000-lb lots, works lb 44 - —
dms. smaller lots, works lb 47 .49
Pontianak copal gum, chips, bgs c.a. .23½- .26
Nubs, bgs lb. .23 .44
Poppy seed, Argentine, bgs. lb No stocks.
Dutch, bgs. lb. .13 - —
Danish, bgs. lb. .12 - —
Polish, bgs. lb. .12½- —
Turkish, bgs. lb .11 - —
Potash, caustic, liq. 45% basis, dms., c.l., works 100 lbs 4.25 - —
dms., t.c.l., same basis 100 lbs 5.25 - —
tanks, same basis 100 lbs 3.70 - —
reg. flake 90% min. dms. same basis 100 lbs 9.55 - —
dms., t.c.l., same basis 100 lbs 11.05 - —
Potash, caustic, solid, 88-92%, dms., c.l., works 100 lbs 9.10 - —
dms t.c.l., works 100 lbs 10.60 - —
Potassium acetate, NF, 200-lb dm., f.o.b works, E lb .31 - —
Potassium bicarbonate, USP, gran., dms lb .22 - —
powd. dms lb .24 - —
Potassium bichromate, gran bgs., c.l. t.l., works lb .18 —
bgs. t.c.l. works lb .18½ 19¼
Potassium bichromate in dms ¼c higher.
Potassium bitartrate, NF, gran., powd. 100-lb bgs., c.l., frt equald lb .37 - —
100-lb bgs. 5,000 lbs. l shipt., same basis lb. .38 - —
100-lb bgs. smaller lots, same basis lb .40 —
Potassium borohydride powd dms, works lb 16.00 22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb lots
Potassium bromate, 200-lb dms., c.l. frt alld lb .49 —
Potassium bromide USP gran., bbls. kgs lb. .39 .40
Potassium carbonate, dom. NF, gran., bbls., works lb .22 .24
Dom tech. powd., bbls. dms lb .21 .22
Dom calcinated bgs. c.l. works 100 lbs 8.50 - —
bgs. t.c.l. same basis 100 lbs 9.55 - —
Dom. hydrated 83-85%, bgs. c.l. works 100 lbs 7.10 - —
bgs t.c.l. works 100 lbs 8.15 - —
Potassium chlorate cryst. dms. c.l., works lb .12¼- —
dms., t.c.l., works lb .13½- .14½
Powd. dms. c.l., works lb .12¾- —
dms t.c.l. works lb .14 .15
works lb 12¼- —
Potassium chlorate, NF, cryst., dms., 2,000 lbs. or more, works lb. .16¾- —
NF gran. 25-lb metal dms lb. .36 - —
NF powd., dms., 2,000 lbs or more works lb. .17¼- —
Potassium chloride indust. 99.9% KCL, bulk, c.l., works ton 29.00 - —
bgs., c.l., works ton 30.00 - —
99.3% KCL, bulk, c.l., works ton 28.00 - —
bgs., c.l., works ton 33.00 - —
USP, cryst., dms lb. 33.00 - —
USP, gran., dms. lb. .21 - .23
USP, powd., dms. lb. .24 - .26

Potassium chloride, agricultural (see Potassium muriate)
Potassium chromate, tech., dms., works lb .50 .51
Potassium citrate, NF gran., 250-lb. dms., f.o.b. works E lb. .43 - —
powd., 250-lb dms. same basis, lb. .46 - —
Potassium cyanide, dms., 20,000-lb. lots or more, dlvd. E lb. .42½- —
dms., 5,000-19,999-lb. lots, works lb. .43 —
dms., 2,000-4,999-lb. lots .43½- —
dms., 1,999-lb. lots or less .44½- .46½
Potassium dichromate (see Potassium bichromate)
Potassium ferricyanide, dms., ton lots, works lb .50 —
dms., smaller lots works lb. .65 —
Potassium ferrocyanide, dms., ton lots lb .24½- —
dms., smaller lots lb .29 —
Potassium fluoborate fib dms., c.l., works lb .30 —
fib dms., l.c.l., works lb .31 —
Potassium fluoride, dms., works lb .36 .37
Potassium gluconate, 100-lb dm., f.o.b. works E lb 1.67 —
Potassium guaiacol sulfonate NF, dms lb 2.10 2.30
Potassium hydroxide tech (see Potash caustic)
Potassium hydroxide, USP, pellets, 100-lb dms., 1 to 100-dm. lots lb .33½ .38
Potassium hypophosphite, NF fib dms 1,000 lb. lots lb 1.38 —
Potassium iodide USP cryst. gran., 250-lb. dm., f.o.b. works lb. 1.55 - —
Potassium manure salt, min 20% K_2O, bulk c.l. works, unit-ton .17 - .1765
Potassium metabisulfite gran. dms., Powd. dms lb .16 - —
Potassium muriate, standard, bulk, c.l., works unit-ton .27 - —
bagged 60% minimum K_2O, same basis ton .36 - .38
Potassium muriate, gran., bulk, c.l., works unit-ton. 26.60 -27.80
bagged 60% minimum K_2O, same basis ton .39 - .41
Inside prices apply to material contracted for prior to July 1, 1961.
Outside prices apply to material contracted for after that date but also for delivery during the current month
Potassium nitrate, NF cryst., bbls., 20-ton lots 100 lbs 17.00 —
bbls smaller lots 100 lbs 18.00 19.00
gran. bgs. 20-ton lots 100 lbs 9.50 —
bgs. smaller lots 100 lbs 11.00 12.00
powd. bgs. 20-ton lots 100 lbs 10.50 —
bgs. smaller lots 100 lbs. 12.00 13.00
Potassium oxalate, neutral, tech., fine gran. powd., 300-lb. dm. f.o.b. works E lb. .32 —
Potassium pentaborate gran. dms., c.l. works ton 219.50 —
dms., ton lots ex whse 100 lbs. 17.48 - —
dms., smaller lots, ex whse 100 lbs. 18.73 —
Powdered potassium pentaborate $10 per ton higher
Potassium perchlorate, dms., c.l., works lb. 18½ —
dms. l.c.l. works lb 19 20
Potassium permanganate, comm. bgs. works lb. .25 .33
USP dms works lb 29 35
Potassium pyrophosphate, tetrabasic, dm. works lb. .1475 .1575
Potassium prussiate red (see Potassium ferrocyanide)
Potassium prussiate yellow (see Potassium ferrocyanide)
Potassium silicate electrical grade, 30° Be. 1:2.0, dms., c.l., works 100 lbs 6.50 —
dms. l.c.l. 5 dm. lots or more works 100 lbs 7.25 7.65
tanks, works 100 lbs 6.15 —
40.5° Be 1:2.1, dms., c.l., works, 100 lbs. 5.95 - —
dms. l.c.l. 5 dm. lots or more, works 100 lbs 6.70 - —
tanks works 100 lbs 5.60 — —
Glass grade, bgs., c.l., works 100 lbs. 17.30 -18.00
bgs., l.c.l., works 100 lbs. 17.80 - —
Soln., 29° Be. 1:2.5, dms., c.l., works 100 lbs 4.95 - —
dms. l.c.l., 5-dm lots or more, works 100 lbs 5.70 - —
tanks works 100 lbs 4.60 — —
Potassium silicofluoride, bgs. works lb .09½ 10
Potassium silicofluoride in drums, 0.4c per lb higher
Potassium stannate dms. frt alld. lb. .870 - .943
Potassium sulfate, min 50% K_2O, agricultural, bulk, c.l., works unit-ton .65½- .67½
Inside price applies to tonnage contracted for prior to July 1, 1961.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month
Potassium sulfate NF VII, cryst., dms lb .31 .33
NF VII, gran. 400-lb. dm lb. .18 —
NF VII powd. 400-lb dm lb. .17 —
Potassium sulfocyanate NF cryst., (see Potassium thiocyanate)
Potassium thiocyanate NF cryst., dms. works lb. .96 .98
Tech. dms. works lb. .77 .79
Potassium titanate coms. c.l. works ctns. 5-ton lots, works lb. .16¼ —
ctns. 1-ton lots or less works lb. .16½ —
Potassium-magnesium sulfate basis 40% K_2SO_4 and 18% MgO, bulk works base price ton 13.45 - —
bulk works July forward ton 14.00 - —
Potassium sodium tartrate, NF gran or powd., 250-lb dms., c.l., works E lb 42½- —
250-lb dms. 5,000-lb lots, same basis lb. .43 —
250 lb dms. same basis lb. .45½ —
Potassium titanium fluoride, fib. dms works lb. .39 .40
Potassium zirconium flouride, fib. dms c.l., works lb. .50 —
fib dms. l.c.l. works lb. .52½ .55
Pregnenolone bots gram No prices
Pregnenolone acetate bots gram No prices
Procaine hydrochloride USP antibiotic grade dms 2,000-lb lots, frt. alld. lb. 2.10 2.25
Procaine hydrochloride, USP, ample grade, dms., 1,000-lb. lots and over 2.40 —
dms 500 lbs lb 2.45 —
dms 100 lbs lb 2.50 —
Progesterone USP bots gram No prices.

Pregnenolone acetate, bots gram No prices.
Propenyl guaethol dms lb. 24.30 27.00
b-Propriolactone tech., dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., t.l., same basis lb. .48½- —
tanks, same basis lb. .45 —
Propionic acid syn. pure, dms., c.l., dlvd lb. .23¼- —
dms., l.c.l., dlvd. lb. .24¾- —
tanks, dlvd lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd lb. .15½- .16½
tanks, dlvd lb. .11½ .12½
n-Propyl gallate dms., 100 to 2,000-lb lots, works lb 3.90 4.40
n-Propyl-p-hydroxybenzoate, USP, dms lb 2.30 2.40
Propyl thiouracil bots., 50 kilo lots or more kilo 55.00 —
bots., smaller lots kilo 55.10 -55.30
n-Propylamine dms., c.l., dlvd lb 1.24 —
dms l.c.l same basis lb. 1.255 —
n-Propylene dichloride consumers, dms, c.l. dlvd E lb. .0845- —
dms., l.c.l. same basis lb .0995- —
tanks same basis lb .07 —
Propylene dichloride prices in West lc. higher same basis
Propylene glycol, indust., dms., c.l., dlvd E lb .15 —
dms., l.c.l., same basis lb .16¾- —
tanks, same basis lb. .12½- —
USP dms. c.l., dlvd E lb. .17 —
dms l.c.l. same basis lb. .18¾- —
tanks, same basis lb. .14½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 —
dms., l.c.l., same basis lb .21 —
tanks, same basis lb. .18½- —
Propylene oxide dms., c.l., dlvd E, dms. l.c.l., dlvd E lb .17 —
tanks, dlvd E lb. .18½- —
Psyllium seed, black, bgs. lb. .42 .45
Blonde bgs lb. .18 .20
Husks, bgs. lb. .45 - .48
Pumice, dom., grd. coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04¼
bgs., smaller lots lb. .03⅞- —
Pumice, imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs. ton lots lb .04 —
sun dried, coarse, bgs ton 60.00 —
fine, bgs. ton 60.00 -70.00
Pumpkin seed, bgs lb. .25 .26
Pyrethrins syn (see Allethrin).
Pyrethrum flowers, fine grd. 0.9% pyrethrins, bgs ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton works lb. .71 - —
Pyrethrum liquid, 20:1 basis (2 grams pyrethrins per 100cc odorless base) dms. works gal 9.60 9.80
100:1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal 45.90 -46.90
Pyrethrum oleoresin, dewaxed 20% purif, dms., works lb 11.00 11.35
20% dms. works lb 11.00 11.35
Pyridine denat dms c.l. works and frt. equald gal 2.75 - —
dms. l.c.l. same basis gal 2.80 - —
Red, 2' non-ret., dms., c.l., same basis lb 75½- —
dms., l.c.l., same basis lb. .76 - .76½
tanks, same basis lb. .71 - —
Potassium persulfate, dms., c.l., works lb. .17½ —
dms l.c.l. works lb. .18 .21
Pyridoxine hydrochloride, USP, dms., f.o.b. works kilo 50.00 - —
Pyrites, Canadian 48-50% S, mines, long ton 4.50 5.00
Pyrocatechol (see Catechol)
Pyrogallic acid NF (see Pyrogallol).
Pyrogallic acid tech, bbls., 100 lbs., f.o.b. works lb 3.50 - —
Pyrogallol NF 100-lb dms lb 3.90 - —
Pyroxylin USP bots lb 9.50 - —

Q

Quassia chips lb. .10 - —
Quicksilver (see Mercury metal)
Quince seed, bgs lb. 1.55 - 1.75
Quinidine sulfate USP 1,000 oz. dm oz. .7815- —
Quinine bisulfate USP 1,000-oz dms. oz. .3750- —
Quinine hydrochloride, 1,000-oz dm. oz. .28 - —
Quinine sulfate USP 1,000-oz dm. oz. .3650- —
Quinotine dms. c.l. frt. equald oz. .3150- —
dms., l.c.l., same basis lb .50¾ —
tanks same basis lb .51¼ —
lb .50 —

R

R salt paste, dms., c.l., t.l., frt. alld., 100% basis lb. .98 —
Powd., dms., c.l., t.l., frt. alld., 100% basis lb. 1.08 —
Rapeseed oil, dms. tanks .19 - .19½
Rare earth oxalate, NF, 45.50% bgs. works lb 1.15 - —
Rauwolfia serpentina root, powd., bbls. dms lb 1.00 1.20
Red carmine No. 40 (see Carmine).
Red oil (see Oleic acid)

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner

Red precipitate (see Mercuric oxide red)
Red toner Lake C, alizarine, bbls., work lb 1.30 - —
Reserpine, cryst. bots gram 1.25 - —
Resorcinol, tech. grade, bgs., c.l., works, frt equald lb 77½- —
bgs., l.c.l., same basis lb. .78½- —
Resorcinol in dms. 1c per lb more.
Resorcinol monoacetate, NF dms. lb 2.50 —
USP powd., dms., works lb 2.85 —
Rhatany root, ogs lb .14 .16
Rhodamine red toner, molybdated, PMA, kgs. works lb 6.00 —
Tungstated PTMA works kgs lb 6.60 —
Rhodinol, 5-lb cans lb 42.00 -51.00
Synthetic lb 14.00 -16.00
Rhubarb root, India, whole, bgs lb .25 —
powd bgs lb 35 - —
Riboflavin USP fib dms., kilo or more, dlvd kilo 36.00 - —
Riboflavin-5-phosphate-sodium, fib. dms. kilo or more, dlvd. kilo 104.70 - —
Rice bran oil, clarified, dms., t.c.l., tanks, dlvd. E lb. .15½- —
lb. .14 - —
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate)
Roofing pitch (see Coaltar pitch, roofing).
Rose oil, nat., Bulgarian, bots lb 1,152.00 —
Turkish, bots., otto lb 600.00 -700.00
absolute lb 145.00 - —
Rosemary oil, Spanish, NF, cns., dms lb 1.15 - 1.20
Spanish, tech., cns., dms lb. .80 - .95
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works unit-lb. .10½- —
Resin, 25-45% fib dms. works, unit-lb. .10½- —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs. ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 —
Rue oil, bots lb. 2.75 3.00
Rutin NF fib dms., 10 kilo lots. kilo 11.00 - —
fib. dms., 5 kilo lots kilo 11.50 - —
fib. dms., 1 kilo kilo 13.00 - —
Ryania 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed activated, ground with lime, bbls lb. .42 .44
Saccharin calcium, fib dms., 1,000-lb lots, works lb. 2.50 - —
Saccharin, USP, gran., soluble, dms., 1,000-lb. lots lb. 1.50 —
dms., smaller lots lb. 1.60 - —
USP, powd., soluble, dms., 1,000-lb. lots lb. 1.55 - —
dms., smaller lots lb. 1.65 - —
USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.53 - —
dms., smaller lots lb. 1.63 - —
Safflower oil, dms., New York lb. .19 - .20
tanks, Atl. coast lb. .17½- —
Saffron, Mancha Superior, tins lb. 19.50 - —
Saffron dms lb 65 - —
Sage, Dalmatian, bgs lb. .40 - —
Greek, cns. lb. .15 - —
Italian, cns lb 18 —
Sage oil, clary, bots. lb. 11.00 -12.00
Dalmatian, cns lb 2.85 3.25
Spanish, cns lb 1.25 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb 1.23 - —
dms., l.c.l., same basis lb 1.25 - —
Salicylamide, 100-lb dms lb 1.05 - —
Salicylic acid, tech, fib dms., c.l., t.l., dlvd lb. .40½- —
fib dms l.c.l. dlvd lb. .44¾- —
USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .51¾- —
200-lb fib dms less than 1,000 lbs lb. .54¾- —
100-lb. fib. dms., 1,000 lbs. or more lb. .53¾- —
100-lb fib dms less than 1,000 lbs lb. .56¾- —
USP, pwd., 100-lb. fib. dms., 1,000 lbs. or more lb. .58¾- —
100-lb fib dms., less than 1,000 lbs lb. .61¾- —
Salol, NF gran. bbls. kgs lb 1.20 —
Powdered salol 25c per lb higher.
Salt rock paper ngs c.l 100 lbs 1.09 - —
Salt table vacuum common, fine, paper bgs. c.l 100 lbs 1.34 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton 28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood E Indian, chips, bgs., powd. fib dms lb .55 .66
Sandalwood oil, cns. lb. 75 .76
Sarcosine, tech. tanks, f.o.b., works, frt equald lb 27.00 -30.00
lb 1.03 —
lb No stocks.
Sassafras oil, artif., dms lb. .45 —
Nat., dom., dms lb 1.40 - —
Savory oil, cns lb 4.75 - —
Schaeffer's salt paste, dms., frt. alld 100% basis lb. .85 - —
Powd. bgs. frt alld. 100% basis, lb. .95 - —
Scopolamine hydrobromide, USP, 10 oz. lots, bots oz. 13.50 - —
Sebacic acid, CP bgs., c.l., works, bgs., l.c.l., works lb. .69½- —
Purified, bgs c.l., works lb. .71½- —
bgs. l.c.l., works lb. .65½- —
Seidlitz mixture fib dms. 5,000-lb. lots lb. .30½- —
fib dms., smaller lots lb. .31 - .32
Selenium, powd., 99½%, dms., dlvd. lb. 6.50 - —
Senega root, bls lb. 2.40 - —
Senna leaves, Alexandria, whole and half, bls lb. .20 - .22
Tinnevelley, No. 1, bls lb. .26 - .30
No. 2, bls lb. .18 - —
No. 3, bls lb. .14 - —
pods, bls lb. .28 - —
powd., bbls., bxs lb. 17 - —
Serpentaria root, bls lb. 7.00 - 7.50
Sesame oil, USP, dms., l.c.l lb. .37 .38
Sesame seed, Colombian, bgs lb. .15½- —
Lebanese, hulled, bgs lb. .19 - —
Nicaraguan, hulled, bgs lb. .21 - —
nat., bgs. lb. .15 - —
Salvadorian, Nat. bgs lb. .16 - —
Shellac, bleached, benedry, bgs., 1,500-lb. lots lb. .47 - —
dms., l.c.l. works lb. .22 - .20½
bbls., 1,500-lb. lots lb. .46 - —
kgs., 1,500-lb. lots lb. .47 - —
Bonedry shellacs prices for less than 1,500-lb lots 1c per lb higher for all packages.
Shellac, bleached, refd. bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb lots lb. .57 - —
kgs., 1,500-lb lots lb. .58 - —
Shellac, orange, lemon No 1, bgs., 10-bg. lots lb. .37 - .39
lemon No 2, bgs., 10-bg. lots, superfine, bgs., 10-bg. lots lb. .34 .37
Shellac in 1 to 10-bg lots 1c per lb more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., l.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs. l.c.l., works lb. .07 - .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton 25.00 —
bgs. l.c.l. works, ex whse. ton 45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton 20.00 - —
bgs., l.c.l., works ton 25.00 - —
99½% 140 mesh, bgs., c.l., works ton 15.00 - —
bgs., l.c.l., works ton 20.00 - —
Silicon tetrachloride, tech., dms., tanks, works c.l., works lb. .20 - —
lb. .15 - —
Silver bullion, ingots, cs Troy oz. .91⅜- —
Silver cyanide, bots., 1,000-oz. lots, bots., 500-oz. lots oz. .94¾- —
bots., 100-oz lots oz. .95¼- —
Silver nitrate, CP cryst., bots., 1,000 to 4,000 oz., f.o.b. works oz. .96¼- —
bots. 250-500 oz., same basis. oz. .67¼- —
USP granular silver nitrate 4c. per oz higher. oz. .67¾- —
Silver proteinate, mild, USP, 16-oz. bots oz. 1.46 - —
Snakeroot oil, Canada, cns lb. 40.00 -43.00
Soapbark, crushed, bls. lb. .40 - —
Powd., bls. lb. .50 - —
Whole, bls. lb. .30 - —
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., l.c.l., stock pts., 100 lbs. 3.00 - 4.77
bulk c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs. t.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda caustic, flake, 76%, dms., c.l., works, frt equald 100 lbs. 5.20 - —
liq. 50% sellers tanks works, dry basis 100 lbs. 2.90 - —
50% rayon type sellers tanks, works, dry basis 100 lbs. 2.90 - —
Liq. 73%, sellers' tanks, works, dry basis 100 lbs. 3.00 - —
liq. 73% rayon type, sellers' tanks, works, dry basis lb. 3.00 - 3.10
solid, 76% dms., c.l., works, 100 lbs 4.80 - —
Soda sal. conc. bgs. c.l., works 100 lbs. 2.50 - —
bgs. smaller lots, works 100 lbs. 2.80 - —
Sodium acetate annyo., bgs., c.l., dlvd. E lb. .14½- —
bgs., l.c.l., same basis lb. .16½- —
NF 60% gran. dms. c.l., works, dms., l.c.l., works lb. .15½- —
Sodium alginate, NF, white powd., dom. 300 lbs. or more lb. 1.02 - —
Sodium p-aminosalicylate dms., 100-lb lots or more, frt. adjusted lb. 1.90 - —
Sodium antimoniate bgs. c.l. dlvd. bgs., l.c.l., dlvd. E lb. .27½- —
E lb. .29 - —
Sodium arsenate, 60% arsenic pentoxide, 200 lb. dm. less than ton lots, f.o.b. works lb. .24 - —
ton lots or more, same basis, lb. .23½- —
Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb dms., ton lots or more, f.o.b. works lb. .18¼- —
1,600-1,900 dms., same basis lb. .19 - —
100-500 dms., same basis lb. .20 - —
Sodium ascorbate, dms., 100-kilos., dms., f.o.b. works kilo. 5.60 - —
less than 100-kilos kilo. 5.85 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms. l.c.l. same basis lb. .39 - —
USP, 100-lb. dms., ton lots, same basis lb. .43 - —
100-lb. dms., 1,000-lb. lots, same basis lb. .45 - —
Sodium bicarbonate USP, gran., bgs., c.l. works 100 lbs 2.95 - —
bgs. l.c.l. works 100 lbs 3.85 - —
USP powd., bgs c.l., works, bgs., l.c.l. works 100 lbs 2.55 - —
100 lbs 3.45 - —
Sodium bichromate, gran., ngs., c.l., t.l., works lb. .13 - —
bgs., l.c.l., works lb. .13½- .14¼
Sodium bichromate in dms ¾c. per lb higher
Sodium bifluoride, fib. dms., c.l., works, frt. equald lb. .19¼- —
fib. dms., l.c.l., same basis lb. .2025- —
Sodium bisulfate, bulk c.l. works, 100 lbs. 2.00 —
dms. c.l., frt. equald 100 lbs. 3.00 3.60
dms., l.c.l., frt equald 100 lbs 3.50 4.10
Sodium bisulfite anhyd., bgs., c.l., works 100 lbs 5.00 - —
bgs., l.c.l., works 100 lbs 5.45 - —
Soln., 35° bbls. c.l., works 100 lbs 1.70 - —
bbls. l.c.l. works 100 lbs. 2.20 - —
Sodium borate (see Borax)
Sodium borohydride, powd., dms., c.l., works lb. 8.00 - —
dms., l.c.l., works lb. 11.75 -14.00
stabilized water soln., 12% NaBH, 100% basis, tanks, works lb. 7.50 - —
dms., same basis lb. 11.50 -13.00
Pelletized sodium borohydride, $1 per lb. higher in 1,000-lb lots.
Sodium bromide, USP, gran. dms., works lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal)
Sodium carbonate, monohydrated, bgs., l.c.l., works 100 lbs. 3.50 - —
bgs., c.l. works 100 lbs 3.10 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., l.c.l., works lb. .09¼- .10¼
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran. bgs. lb. .05 - —
Sodium chlorite, tech., dms., c.l., works lb. .58 - —
dms. 20-dm lots or more, works lb. .66 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms. l.c.l., works lb. .28 - —
Sodium chromate, anhyd. fib. dms., c.l., t.l., works lb. .14¾- —
fib. dms l.c.l. works lb. .15¼- .16¼
Tetrahydrate, bgs., c.l., t.l., works, lb. .1015- —
bgs., l.c.l. lb. .1065- .1190
Sodium citrate, anhyd., 200-lb dm., f.o.b. works E lb. .62 - —
NF VIII, gran. bgs., c.l., same basis lb. .26 - —
USP XIV, gran. bgs., c.l., same basis lb. .29 - —
Sodium citrate, USP powd prices ½c higher.
Sodium cyanate, dms., 1,000-lb. lots, works lb. .85 - —
dms., smaller lots, works lb. .90 - 1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., dlvd., E. of Rockies, 20,000-lb lots lb. .183 - —
dms., same basis, 5,000 to 19,999-lb. lots lb. .203 - —
dms., same basis, 2,000 to 4,900-lb. lots lb. .208 - —
dms., same basis, 1,999-lb. lots and under lb. .218 - —
Sodium cyclamate, 100-lb dm. f.o.b. works lb. 1.85 - —

Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb. dms., l.c.l., works lb. 18¾ - —
Tech., 33-35% acetic acid, dms., l.c.l., works lb. .15 - —
250-lb. dms., l.c.l., works lb. .15¾ - —

Sodium dimethyl dithiocarbamate, 40% soln., dms., c.l., t.l., frt. alld., 100% basis lb. .42 - —
dms., l.c.l., t.l., same basis lb. .47 - .52
tanks, same basis lb. .38 - —

Sodium ferrocyanide, bgs., 10-ton lots lb. .13¼ - —
bgs. smaller lots lb. .14¼ - —

Sodium fluoride, white, 97%, fib, dms., c.l., works, frt. equald lb. .1390 - —
fib, dms., l.c.l., works, frt. equald lb. .1465 - —

Sodium formate, bgs., c.l., works, 100 lbs. 7.05 - —
bgs., l.c.l., ex whse 100 lbs. 8.65 - —

Sodium gentisate, 100-lb. fib. dms. lb. 5.50 - —

Sodium gluconate, refd., 250-lb. dm., f.o.b. works E lb. .84 - —
Tech., bgs., c.l., t.l., same basis lb. .34 - —

Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 - 2.50
25% soln. in oil, dms., 50 lbs. or less, f.o.b. shipping point. lb. 2.20 - —
dms., 50-99 lbs. same basis lb. 1.77 - —
dms., 100-999 lbs., same basis lb. 1.20 - —

Sodium hydride, dms., 1,000 lbs. or more, same basis lb. .95 - —

Sodium hydrosulfide (see Sodium sulfhydrate).

Sodium hydrosulfite dms. c.l., frt. alld lb. 23½ - —
dms., l.c.l. frt. alld. lb. 25¼ - —

Sodium hydroxide, NF, pellets, 100-lb dms., 1 to 100-dm. lots. lb .23½ - .26

Sodium hydroxide, tech. (see Soda, caustic).

Sodium hypophosphite, NF, dms. 1,000-lb. lots lb. .99 - —

Sodium hyposulfite (see Sodium thiosulfate).

Sodium iodide, USP, 300-lb. dms., f.o.b. works lb. 2.13 - —

Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½ - —
dms., l.t.l., dlvd. lb. .21½ - —
tanks, dlvd. lb. .19¼ - —

Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 - —
l.c.l., bgs., works 100 lbs. 4.75 - 5.25

Sodium metabisulfite (see Sodium bisulfite).

Sodium metaborate, octahydrate, gran., bgs., c.l., works ton. 210.00 - —
bgs., ton lots, ex whse 100 lbs. 8.30 - —
bags, smaller lots, ex whse. 100 lbs. 9.61 - 11.61

Tetrahydrate, bgs., c.l., works ton. 210.00 - —
bgs., ton lots, ex whse 100 lbs. 14.83 - —
bgs., smaller lots, ex whse 100 lbs. 16.08 - 18.08

Sodium metallic, bricks, c.l., works lb. .21 - —
Fused, 18,000-lb. lots or more, works lb. .19¼ - —
tanks, works lb. .17 - —

Sodium metalinate, bbls., frt. alld. lb. .62 - —

Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11.70 - —
dms., l.c.l., same basis 100 lbs. 12.45 - —

Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs. 6.05 - —
dms., c.l., works 100 lbs. 6.20 - —
dms., l.c.l., works 100 lbs. 6.55 - —

Sodium metasilicate, pentahydrate, bgs., c.l., works 100 lbs. 4.45 - —
bgs., l.c.l., works 100 lbs. 4.80 - 6.75
dms., l.c.l., works 100 lbs. 4.95 - —
dms., l.c.l., works 100 lbs. 5.30 - 7.25

Sodium molybdate, anhyd., dms., works, frt. equald lb. 1.02 - 1.21
Cryst., dms., works, frt. alld lb. .84 - .86

Sodium monoglutamate (see Monosodium glutamate).

Sodium monohydrate (see Sodium carbonate, monohydrated).

Sodium naphthionate, bbls. lb. .77 - —

Sodium nitrate, dom., crude, bgs., c.l., works ton. 48.00 - —
bulk, c.l., works ton. 44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton. 48.00 - —
bulk, c.l., same basis ton. 44.00 - —

Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 9.40 - —
bbls., l.c.l., same basis 100 lbs. 11.40 - —

Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65

Hydrated, flake, bbls., c.l., works. 100 lbs. 5.65 - —
bbls., l.c.l., works 100 lbs. 7.60 - 7.90

Sodium oxalate, 88%, bgs., works. 100 lbs. 12.35 - —
99%, bgs., works 100 lbs. 15.40 - —

Sodium para-aminobenzoate (see Sodium p-aminobenzoate).

Sodium para-aminosalicylate (see Sodium p-aminosalicylate).

Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., l.c.l., same basis lb. .27½ - .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½ - .34
Powd., dms., c.l., same basis lb. .25 - —
dms. l.c.l., same basis lb. .26½ - .33

Sodium pentabarbital, USP, dms., 100 lbs. or more lb. 6.00 - —

Sodium perborate, NF, tech., bgs., c.l., works lb. .18½ - —
bgs. l.c.l. works lb. .19 - .21

Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss lb. .21½ - —
dms., l.c.l., same basis lb. .22 - .22½

Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 - —

Sodium phenosulfonate, USP, IX, gran., dms lb. .52 - .53
NF, powd. dms. lb. .55 - .56

Sodium phosphate, dibasic, anhyd., bgs., c.l. frt. equald 100 lbs. 8.10 - —
bgs., l.c.l., same basis 100 lbs. 8.50 - 9.55

Sodium phosphate, dibasic, cryst., bgs., c.l., t.l., frt. equald. 100 lbs. 4.75 - —
bgs., l.c.l., frt. equald 100 lbs. 5.15 - 5.90

Duohydrate, bgs., c.l., frt. equald. 100 lbs. 7.75 - —
bgs., l.c.l., same basis 100 lbs. 8.25 - —

Monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.15 - —
bgs., l.c.l., same basis 100 lbs. 9.55 - 10.15

Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.15 - —
bgs., l.c.l., frt. equald 100 lbs. 9.60 - 10.20

Sodium phosphate in dms. 60c. to 80c. higher than bgs.

Sodium phosphate, USP, dried, powd., bgs., dms., works lb. .19 - .20½

Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald lb. .90 - —

Sodium propionate, any quantity, dms., dlvd. E. of Rockies. lb. .34½ - —

Prices W. of Rockies 3c. per lb. more.

Sodium prussiate, yellow (see Sodium ferrocyanide).

Sodium pyrophosphate, acid, bgs., c.l., works, frt. equald. 100 lbs. 11.25 - —
bgs., l.c.l., same basis 100 lbs. 12.00 - 12.50

Ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l. works lb. .37 - .39

Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.38 - —
bgs., l.c.l., same basis 100 lbs. 8.13 - —
bulk, hopper cars, same basis. 100 lbs. 6.83 - —

Sodium salicylate, USP, dms., 1,000-lbs. or more lb. .78½ - —
dms., less than 1,000 lbs., dms. lb. .81½ - —

Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
l.c.l., dlvd. zone 1 100 lbs. 4.10 - 4.35
dlvd. zone 2 100 lbs. 4.35 4.60
dlvd. zone 3 100 lbs. 4.75 4.90
dlvd. zone 4 100 lbs. 5.35 5.60

Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss. south of 31°; Tex. E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs. 5.70 - —
dms., c.l., t.l., works 100 lbs. 6.20 - —

Sodium sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
dms. 6,000-19,900 lb. lots, works. 100 lbs. 5.83 - —

Sodium silicate, liq., 40° Be., 1:3.2, turbid, dms., c.l., works. 100 lbs. 1.65 - —
dms., l.c.l., works 100 lbs. 1.90 - 2.40
tanks, works 100 lbs. 1.30 - —

47° Be. 1:29.9, turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs. 1.90 - —

52° Be. 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —

Solid, 1.3.2, bgs., works ton. 67.50 - —

Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .725 - —

Sodium silicofluoride in dms., 0.4c. per lb. higher

Sodium stannate, dms., works, frt. alld. E. lb. .736 - .793

Sodium sulfa drugs (see Sulfa name).

Sodium sulfanilate, bbls., works lb. .22 - —

Sodium sulfate, NF VII, dried, powd., dms lb. .22½ - —

Tech., anhyd. bgs., c.l., dlvd. E. ton. 56.00 - —

Tech., detergent, rayon grade, bgs., c.l., works ton. 38.00 - —
bulk, c.l., works ton. 34.00 - —

USP, cryst., fib dms. lb. .17½ - .18

Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald lb. .07¼ - —
dms., l.c.l., same basis lb. .08¼ - —
Liq. 40-44%, tanks, works, 100% basis ton. 130.00 - —

Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½ - —
bbls., l.c.l., same basis lb. .06½ - —

Sodium sulfite, anhyd., tech., bgs., c.l., works 100 lbs. 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Powd., bgs., c.l., works 100 lbs. 7.53 - —
bgs. l.c.l. same basis 100 lbs. 7.95 - —

Sodium sulfocyanide, CP (see Sodium thiocyanate).

Sodium tetraborate (see Borax).

Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald lb. .04½ - —
dms., l.c.l. same basis lb. .05½ - —

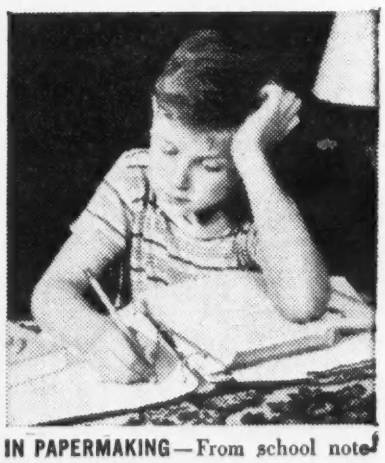
Sodium thiocyanate, purified, cryst., 250-lb. dms lb. .90 - —
Tech., anhyd., dms., 1 ton lots or more, works lb. .367 - —
dms., less than ton lots, works lb. .387 - —

Sodium thiosulfate, NF, cryst., bbls. lb. .13½ - —
Tech., anhyd. 100-lb. bgs., c.l., t.l., frt. equald, 100 lbs. 7.75 - —
100-lb. bgs., l.c.l., t.l., frt. equald 100 lbs. 8.15 - —

HOW *HERCULES* HELPS...

MAKE EXPLOSIVES WORK BETTER—Construction officials examine model of the Niagara Power Project, a mammoth 3-year job on which Hercules® explosives were used to blast out a large portion of the 38 million cu. yds. of excavation, mostly rock. This work included application of the economical, efficient, Hercules-developed Presplitting technique that leaves wall faces smooth, perpendicular and exact to within a 6" tolerance.

WHEN HEAT AND PLASTIC MEET—Resistance to heat from the projector light made Pro-fax® polypropylene a "must" for this magnifier-projector. Other plus features: the machine is readily portable, being made from the lightest of all plastics—it is virtually unbreakable—and the rich, colorful finish is immune to staining.



IN PAPERMAKING—From school notebooks to milk cartons, almost every paper product in use today benefits from Hercules papermaking chemicals. Hercules research and technical assistance help give paper smoothness, wet-strength, moisture and alkali resistance—in fact, almost every characteristic a paper product needs.

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CHEMICAL MATERIALS FOR INDUSTRY

661-9

Sodium thiosulfate, photograde, 64-lb. bgs., c.l., t.l., frt. equald. lb. .0775- —
64-lb ngs. l.c.l. t.t.l., frt. equald lb .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
100-lb bgs., l.c.l., t.t.l., frt. equald 100 lbs 5.20 - —
Sodium titanate, ctns. c.l., works. lb. 14¼ — —
ctns. 5-ton lots works lb. .14½ — —
ctns., 1-ton lots or less, works lb .14¾- —
Sodium trichloroacetate 90% 100-lb dms., c.l. frt alld E. lb. .35 - —
50-lb dms. c.l., frt. alld. E lb .35½- —
10-lb cns., c.l. frt alld E lb 42 — —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c per pound higher.
Sodium tripolyphosphate, bgs., c.l. works, frt. equald 100 lbs. 7.73 - —
bgs., l.c.l., same basis 100 lbs. 8.48 - —
bulk, hopper cars, same basis. 100 lbs. 7.18 - —
Sodium tungstate tech. kgs. dlvd E lb 1.32 - —
Sodium-ammonium phosphate, purif., cryst. dms. works lb .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen sodium).
Sodium formaldehyde sulfoxylate dms., t.l., dlvd lb. 22½- —
dms., l.t.l., same basis lb. .23 - —
Sodium-zirconyl sulfate, fib dms. 1,000-lb lots or more works lb .28 - —
fib. dms., smaller lots, same basis lb .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35½
Petroleum, straight, aromatic, 310°-360F. b.r., 14 -16°C. m.a.p., tankcars, New Jersey and New York gal. .29 - —
Houston, Texas gal. .29 - —
355° 420°F. b.r., 17° 18°C. m.a.p., tankcars, New Jersey and New York. gal. .30 - —
Houston, Texas gal .30 - —
Partial aromatic, 211°-265°F b.r., 31°C m.a.p., tankcars, New Jersey and New York gal. .235 - —
286°-340°F. b.r., 22°C m.a.p., tankcars, New Jersey and New York gal. .275 - —
319°-380°F. b.r., 27° C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322° 395 F b.r., 28°C m.a.p., tankcars, New Jersey and New York gal. .28 - —
Sorbitan monostearate fib dms., 20,000-lb lots, works lb. .33½- —
10,000 to 20,000-lb. lots, works. lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½
Sorbitan tristearate fib dms. 20,000-lb lots works lb. .34 — —
fib dms. 10,000 to 20,000-lb lots, works lb .36 — —
fib dms. smaller lots works lb .39 — .41
Sorbitol, USP, reg., 70% aqueous, dms. c.l. works lb .18 - —
dms. l.c.l. works lb. .19 - —
tanks, works lb. .16¼- —
cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms. 1 to 5-ton lots, works. lb 25 .26
powd., dms., c.l., works lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb. 40½ —
Sorbitol, soln., comml., aqueous, dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27 - —
tanks, works lb. .23¼- —
Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 - —
bgs. l.c.l., works lb. .23¼ .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted, Decatur ton 51.00 - —
Soybean oil, crude, tanks, Decatur, lb. .10¼- —
Foots, soapstock acid 95%, tanks, New York lb. .06¼- —
Alkali, refd., dms. lb. .1480- .1505
tanks lb. .1280- —
Clarified, dms. lb. .1430- .1455
tanks lb. .1230- —
Refd., salad, dms. lb. .1475- .1500
tanks lb. .1275- —
Soybean oil acids, dbl. dist., dms., lb. .17¼- .18½
tanks lb. .14¾- —
S. D., dms. lb. .16 - .18½
tanks lb. .13½- —
Sparteine sulfate, cns. 100 oz. or more oz. .80 — —
Spearmint leaves, dom. bls lb 75 — —
Spearmint oil, NF, dms lb. 3.75 - —
Sperm oil, bleached winter, 45°, dms. lb. .1750- .1850
tanks lb. .1550- —
Nat., winter, 45°, dms. lb. .1650- .1750
tanks lb. .1450- —
Spermaceti wax, blocks, cs lb. .32 - .33
cakes, cs. lb. .33 .34
Spruce oil, cns. dms. lb 2.10 3.55
Squill, white, bls. lb. .16 .18
Powd., bbls, bxs lb .17 .20
St. John's bread, edible, bls lb. .17 - .20
Stannic chloride, anhyd., dms., works lb. .906 - .928
Stannous chloride, anhyd., dms lb 1.129 - 1.384
Stannous chloride, hyd., crystal, 800 lbs. or more lb .96 - —
Stannous oxide, dms., dlvd lb. 1.682 - 1.812
Stannous sulfate, works lb. 1.217 - 1.257
Star root (see Helonias root)
Stargrass root (see Aletris root.)
Staves acre seed bgs lb. .60 .61
Stearic acid, bbl. pressed, bgs. lb. .16¾- .19¼
Single-pressed, bgs. lb. .16¼- .18¾
Triple-pressed, bgs. lb. .18½- .21
Stoddard solvent, petroleum tanks, east coast, New Jersey, New York gal. .18 —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12875- —
Stramonium leaves, bgs lb. .15 - .20
Streptomycin sulfate, bulk gram. .028 - .03
Strontium bromide, NF, cryst., gran., 150-lb dm., frt. equald lb. 1.00 - —
Strontium carbonate, pur., dms., 2-ton lots or more, works lb. .35 - —
dms. 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate fib dms. dlvd. lb. 48 - —
Strontium iodide jars, 25-lb lots lb 3.57 - —
Strontium nitrate bgs. c.l. works 100 lbs 11.00 - —
bgs., l.c.l., works 100 lbs 12.00 - —
Strontium salicylate, NF, dms lb. 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works. ton 56.70 -66.15
Strophanthin G (see Quabain, USP).
Strophanthin K, bots. oz. 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 2.50 - 3.00
Styrax gum, USP cs. lb. 4.50 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., dlvd lb. .17 - —
dms., l.c.l., same basis lb. .19 - —
tanks, frt. equald. lb. .132 - —
Tech., 99.2%, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tanks, frt. equald lb. .11 - —
Above prices are escalated for each calendar quarter on the basis of cost of benzene in the range of 31c. to 34c a gallon and petroleum refining labor.
Styrolyl acetate, bots lb. 1.03 1.10
Succinic acid, purif., cryst., dms., c.l., frt. alld lb. .62 —
dms., l.t.l., same basis lb. .63 - .75
Succinic anhydride, dms., c.l., t.l., dlvd lb. .51 - —
dms., l.c.l., same basis lb. .52 - —
Sucrose, refd. white, bgs. refy E. lb. .0930- —
Sucrose acetate, isobutyrate, 90%, dms. t.l., dlvd lb. .33½- —
dms., l.t.l., same basis lb. .35 —
tanks, same basis lb. .31 —
100%, t.l., dms., dlvd. lb. .35½- —
l.t.l., dms., same basis lb. .37 - —
Sucrose octa-acetate denaturing grade, 100-200-lb. lots, bgs. l.c.l., works lb. 1.00 - —
Sugar (see Sucrose).
Sugar cane wax, dom., refd. slabs, 80-lb ctns., works lb. .60 .65
80-lb ctns. spot lb. .65 .75
Sulfabenzamide, dms. kilo 8.80 9.90
Sulfabenzamide-sodium, dms. kilo 9.00 -10.10
Sulfacetamide, USP, fib dms kilo. 6.61 6.83
Sulfacetamide-sodium USP, fib. dms kilo 8.15 9.25
Sulfadiazine, USP, microcrystals, dms kilo. 23.35 -24.45
USP, powd., dms. kilo. 22.60 -23.70
Sulfadiazine-sodium, USP, dms kilo. 24.80 -25.90
Sulfaguanidine, NF X, dms kilo 5.50 6.60
Sulfamerazine, USP, microcrystals, dms kilo. 23.50 - —
Sulfamerazine-sodium, USP, powd., dms kilo. 24.80 25.90
Sulfamethazine, USP XV, microcrystals, dms kilo. 18.60 -20.75
USP XV powd. dms kilo. 18.75 -19.85
Sulfamic acid, cryst. dms., c.l., t.l., works 100 lbs. 16.00 —
dms. l.c.l., t.l.l., works 100 lbs. 17.50 18.50
Gran., dms., c.l., t.l., works 100 lbs. 14.75 —
dms., l.c.l. t.l.l. works 100 lbs. 16.25 -17.25
Sulfanilamide, NF reg. 1,000 lb., fib. dms., frt. equald lb. 1.75 - —
NF, reg., smaller lots, fib. dms., frt. equald lb. 1.80 - —
Sulfanilamide, quinoxaline, veterinary, dms kilo. 16.28 - —
Sulfanilic acid, tech. dms. c.l., frt. alld lb. .21 - —
dms., l.c.l., frt alld lb. .23 - —
Sulfapyridine, USP XV powd., bots., tins kilo. 15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo. 16.55 -17.65
Sulfathiazole, NF X, microcrystals, dms kilo. 6.25 6.90
NF X, powd. dms. kilo 5.50 6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb 2.35 —
Sulfur, comi., flour, bgs., mines. 100 lbs. 2.35 - —
bbls., mines 100 lbs. 3.30 - —
lump, bgs., mines 100 lbs 2.25 - —
bbls., mines 100 lbs 2.80 - —
Sulfur, crude, dom. bright, bulk, f.o.b. cars, mines long ton. 23.50 - —
export, f.o.b vessels, Gulf ports long-ton. 25.00 - —
US and Canada f.o.b. vessels Gulf ports long-ton 25.00 —
Domestic dark sulfur prices are $1 per long-ton lower
Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos long-ton 24.00 — —
Mexican dark sulfur price is $1 per long-ton lower.
Sulfur, refd., flowers, NF, bgs., mines 100 lbs 5.65 - —
bbls., mines 100 lbs 7.00 - —
flour, light, bgs., mines 100 lbs 5.25 - —
bbls., mines 100 lbs 6.25 - —
lump, bgs., mines 100 lbs 4.95 - —
rolls, bgs., mines 100 lbs 5.50 - —
bbls., mines 100 lbs 6.25 - —
salt block, bgs., mines 100 lbs 4.65 - —
virgin block, bbls., mines 100 lbs 4.70 - —
Sulfur, rubbermakers, comi., reg., bgs., mines 100 lbs 2.45 - —
bbls., mines 100 lbs 3.70 - —
98-100%, pashing through mesh, bgs., mines 100 lbs. 2.55 - —
bbls., mines 100 lbs 3.80 - —
Sulfur, refd., bgs., mines 100 lbs. 4.90 - —
bbls., mines 100 lbs 6.05 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs 4.00 - —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .05½- —
ret. dms., l.c.l., same basis lb. .06¾- —
tanks, same basis lb. .04½- —
Sulfur dioxide, liq. comi., cyls., works, frt. equald lb. .10 - .13
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
refrigeration, cyls., dlvd lb. .33 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .05½- —
dms., l.c.l., same basis lb. .06¾- —
tanks, same basis lb. .04½- —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., l.c.l., works 100 lbs. 2.30 - —
tanks, works ton 18.60 - —
66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., l.c.l., works 100 lbs 2.55 - 3.35
tanks, works ton 22.35 - —
98%, tanks, works, East ton 23.50 - —
99%, tanks, works, East ton 23.70 - —
100%, tanks, works, East ton 23.95 - —
Sulfuric acid, California works, tanks ton 26.45 - —
CP, NF consumers cbys., c.l., frt. equald lb. .12¾- —
Sulfuric acid, CP, NF, consumers' cbys., l.c.l., same basis lb. .14¼- .14¾
5-pt. bots, extra cs. c.l., works, frt. al'd lb. .16¼- —
5-pt. bots, extra cs. l.c.l., same basis lb. .17¾- .18¾
Sulfuric acid, fuming (oleum), 20% tanks, works ton 25.00 - —
40%, tanks, works ton 29.00 - —
65%, tanks works ton 39.50 - —
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
Superphosphate, triple, 45% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla., unit-ton. 1.00 - —
bulk, f.o.b. vessel at Fla unit-ton. 1.05 - —
Sweet birch oil, USP, northern, cns lb. 4.00 9.50
USP, southern, cns lb. 2.00 3.05

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2,4,5-T, dms., c.l., works, frt. equald, lb. 1.18 - —
dms., l.c.l., same basis lb. 1.25 - —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works lb. 1.29 - —
Talc, dom., fibrous, grd., bgs., c.l., works, New York ton 28.00 — —
bgs., l.c.l. works ton 31.00 -36.00
99.5%, 325 mesh, bgs., c.l., works, New York ton 31.00 - —
bgs. l.c.l. works ton 34.00 - —
99.95X, 400 mesh, micronized, bgs., c.l. works ton 38.00 - —
625 mesh micronized, bgs., c.l. works ton 80.00 — —
Dom., ord., Calif., grd., bgs., c.l., works ton 34.00 -39.50
Vermont, off-color grd., bgs., c.l., works ton 19.40 — —
bgs. l.c.l., works ton 37.00 — —
Imp., Canadian, grd., bgs., c.l., mines ton 20.00 -35.00
tanks, works lb. .02¾- .03¼
Tall oil, crude, tanks, works lb. .07¼- .07½
Acid, refined dms., c.l., works lb. .08¾- .10
tanks, works lb. .07½- .08¾
Dist., depending on grade, dms., c.l., works lb. .07¼- .09¾
tanks, works lb. .06 - .08½
Tall oil fatty acids, less 2% rosin acid, dms., c.l., works lb. .09¾- .11
tanks, works lb. .07¾- .09
2-6% rosin acid, dms., c.l., works. lb. .08½- .09
tanks, works lb. .06½- .07
Tallow, edible, tanks, dlvd lb. .08 - —
Inedible, fancy, bleachable, tanks, lb. .05¾- —
fancy, guarant'd, bulk, f.o.b., steamer lb. .06¾- —
dms., f.a.s. lb. .07¾- —
Inedible, fancy, guaranteed, tanks, dlvd lb. .05⅞- —
No. 1, dlvd lb. .05 - —
Prime, tanks, dlvd. lb. .05½- —
Special tanks, dlvd lb. .05¼- —
Sulfonated, 25%, bbls., l.c.l, lb. .08½- .08¾
50%, bbls., l.c.l. lb. .10½- .11
Tallow acids, dist., dms. lb. .13¼- .15¾
tanks lb. .10¾- —
Hydrogenated, dms. lb. .15½- .18
Tallow oil, acidless, dms., c.l. lb. .14 - —
dms., l.c.l. lb. .16 - —
tanks lb. .12½- —
Tangerine oil, Florida, dms. lb. 4.25 - —
Tankage, animal, feeding, 9-11% ammonia, New York bulk, unit-ton. 4.75 5.00
Tannic acid, NF fluffy, bbls., 1,000-lb lots lb 2.05 — —
bbls., smaller lots lb 2.06 2.07
powd., bbls., 1,000-lb. lots lb 1.95 - —
bbls., smaller lots lb 1.96 1.99
Tech., dms lb 1.05 — —
Tansy oil, dms lb. 6.60 8.00
Tar acid oil, 15-18%, dms., c.l., dms., l.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
25-28%, dms., c.l., frt. equald basis gal. .53½- —
gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms., c.l., same basis gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —
Tar, coal (see Coaltar)
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, NF, 100-lb bgs., c.l., frt. equald lb. .41 - —
bgs., 10,000 lbs. 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb fib. dms lb. .70 - —
Terpineol, extra, dms lb. .50 - .60
Prime, dms. lb. .40 - .50
Terpinyl acetate, extra, cns., dms. lb. .64 - .75
Prime, dms lb .53 .56
Terpinyl propionate, dms lb. 1.65 1.70
Testosterone, USP, bots gram No prices.
Testosterone propionate, USP, bots. gram. No prices.
Tetrachloroethane, dms. works lb. .14½ —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene, tech. (see Perchloroethylene)
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., l.c.l., works lb. .22 .23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .65 - —
dms., l.c.l., dlvd. E lb. .66½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .53½- —
dms., l.c.l., dlvd. E lb. .55 - —
tanks, dlvd. E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt alld lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½- —
dms., l.c.l., or l.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .25½- —
dms., l.c.l., Memphis, Tenn. lb. .26½- —
dms., c.l., t.l., Newark, N.J. lb. .27½- —
Tetrahydrofurfuryl alcohol, dms., l.c.l., Newark, N. J. lb. .28½- —
tanks, dlvd. E. of Denver lb. .25 - —
tanks, dlvd. W. of Denver lb. .26 - —
Tetrahydrophthalic anhydride dms., c.l., t.l., frt alld. E lb. .39 - —
l.c.l., t.t.l., same basis lb. .41 - —
Tetrapotassium phosphate (see potassium phosphate)
Thallium metal, dlvd lb. 7.50 -10.00
Thallium sulfate, 99%, bots., dlvd. lb 5.00 -10.00
Theobromine, NF fib dms. 100-lbs., f.o.b., works lb. 4.10 4.15
Theobromine and sodium acetate, USP, fib dms., 500-lbs. works lb. 6.45 - —
Theobromine, sodio-salicylate, NF, fib. dms., 500-lbs., works. lb. 3.80 - —
Theophyline, USP, anhyd., 100-lb. dms., frt alld lb. 3.65 - —
Thiamine hydrochloride, USP, fib dms., frt. alld kilo. 27.00 - —
Thiamine mononitrate, USP, fib dms., frt. alld kilo. 27.00 - —
Thiocarbanilide, dms., ton lots lb. 74 - —
dms., less ton lots lb 76 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.20 - —
Tungstated, PTMA, kgs., works lb. 6.20 - —
Thioglycolic acid, refd., 55 gal. dms., ton lots, 100% basis lb. 1.18 - —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works lb. 4.00 - —
Thiourea, tech., bgs., t.l., frt. alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib dms., 100-lb. lots or more, works lb. 3.50 - —
dl-Threonine, dms., 25 kilos, works, kilo. 115.00 - —
Thyme leaves, French, tripie sifted extra, bgs lb. .25 - —
Spanish, extra, bgs lb. .11 - —
reg., bgs. lb. .08 - —
Thyme oil, NF, red, cns., dms. lb. 3.25 - 3.60
NF, white, cns lb. 3.50 - 3.95
Tech., white, cns lb. .80 - 1.10
Thymol, fib dms., 25-lbs., f.o.b. works lb 2.45 - —
Thymol iodide, NF, dms., 100-lbs f.o.b. works lb. 7.30 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.22 - —
Tin oxide (see Stannic oxide)
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd. (see Stannic chloride, anhyd.).
Titanium dioxide, anatase, all grades, bgs., 30-ton c.l. min. frt. alld. lb. .25 - —
20-ton c.l. min. frt. alld. lb. .25½- —
bgs., l.c.l., same basis lb. .26 - .26¼
Titanium dioxide, rutile, all grades, bgs., 30-ton c.l. min. frt. aid lb. .27 - —
20-ton c.l., min. frt. alld. lb. .27½- —
bgs., l.c.l., same basis lb. .28 - .28¼
metallurgical, nat., bgs., c.l., f.o.b Jacksonville Fla. ton. 180.00 - —
Titanium dioxide, metallurgical, nat., bgs., 5-ton lots, Niagara Falls, N. Y ton. 205.00 - —
bgs. ton lots, same basis ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide-calcium pigment, 30% Ti O2, reg. bgs., 30-ton c.l., f.o.b. lb. .09¼- —
20-ton c.l., works lb. .09¾- —
bgs., l.c.l., works lb. .09¾- —
50% Ti O2, high-tinting, dms., 30-ton c.l. lb. .14¼- —
20-ton c.l., works lb. .14¾- —
dms. l.c.l. lb. .14⅞- —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech. dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .20 - —
Tobias acid, dms., c.l., t.l., 20,000 min., f.o.b. plant, frt. alld. E lb. .81 - —
dms., l.c.l., l.t.l., 5,000-lbs.-19,999 lbs., same basis lb. .81½- —
dms., l.c.l., .l.t.l., less than 5,000 lbs., same basis lb. .84 - —
For west coast delivery add 2c. per lb.
d-a-Tocopherols, NF, mixer, conc., pure basis, bots kilo. 67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo. 109.00 - —
dl-a-Tocopherol, bots. kilo. 99.00 — —
dl-a-Tocopheryl acetate, bots kilo. 90.00 — —
25% dry, powd., bots kilo. 22.50 -24.00
33% dry, powd., bots. kilo. 30.00 -31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 — —
Paste, kgs., 100% basis lb 1.50 — —

TOLUOL
Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride paste, kgs., 100% basis lb 1.50 — —
Tolu balsam, cns. lb. 4.00 - 4.50
Toluene, coaltar, indust., or nitration, tanks, dlvd. E. of Rockies gal. .25½- —
Petroleum, indust., tanks, f.o.b., frt. equald gal. .25 - —
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., l.t.l., same basis lb. .63 - —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb. .16 - —
1,000-lb. or more, same basis lb. .18 - —
less than 1,000-lb., same basis lb. .23 - —
tanks, same basis lb. .14 - —
Toluenesulfonic acid in 10-gal. dms. 2c per lb more.
p-Toluenesulfonic acid mononydrate, dms., c.l., or t.l lb. .90 - —
dms. 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms. c.l., works, frt. alld lb. .83 - —
dms., l.c.l., same basis lb. .84 - —
tanks, same basis lb. .82 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .27 - —
dms., l.c.l., same basis lb. .28 - —
tanks, same basis lb. .26 - —
p-Toluidine, tech. flake, dms., frt. alld lb. .50 - —
Cast, dms. frt. alld lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs, works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt alld lb. 1.10 - —
Tonka beans, Angostura, prime f.o.b., N.Y. lb. 1.35 - 1.50
Brazilian, Surinam, cs., same basis lb. 1.00 - 1.10
Totaquine, 100-oz. lots, cns. oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. .22 - —
dms. l.c.l. t.t.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb. 4.10 4.20
No. 2, cs. lb. 3.75 3.80
No. 3, cs. lb. 3.40 3.65
USP powd., bbls. lb 1.05 1.15
Triacetin, dms. c.l., dlvd. E. of Rockies lb. .38 - —
dms., l.c.l., same basis lb. .39½- —
tanks, same basis lb. .35½- —
Triallylamine, dms., c.l., dlvd lb. .985 - —
dms., l.c.l., dlvd. lb. .995 - —
tanks, dlvd lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld E. of Denver. lb. .42½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt alld E of Denver lb. .40 - —
Tributyl phosphate, dms., c.l., works. lb. .52½- —
dms. l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine, dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb. .65 - —
Tributyrin, dms l.c.l. dlvd lb. .69 - —
Trichloroacetic acid, tech., 300-lb. dms. c.l., f.o.b works lb. .52 - —
USP, 100-lb. dms., frt. equald lb. 1.25 - —

Trichlorobenzene, dms., c.l., frt. alld. E lb. .15 - —
dms., t.c.l., frt. alld. E ..... lb. .16 - —
tanks, frt. alld. E ..... lb. 13¼- —
Trichlorobenzene prices in the West 1¾c. higher.

1,1,1-Trichloroethane, dms., c.l., divd. lb. .13¼- —
dms., t.c.l., divd ..... lb. .16 - —
tanks, divd ..... lb. .12¼- —

1,1,2 Trichloroethane, dms., c.l., works lb. .15½- —
dms., t.c.l., works ..... lb. .16¼- —
tanks, works ..... lb. .13½- —

Trichloroethylene dms. c.l., or t.l., divd lb. .12½- —
dms., t.c.l., divd. ..... lb. .14 - .14½
tanks, divd ..... lb. .11¼- —

Trichloroisocyanuric acid dms., c.l., t.l., frt. equald lb. 65 - —
dms., t.c.l. same basis lb 75 - —

Trichlorophenoxyacetic acid (see 2,4,5-T).

Tricholine citrate, 65% soln., non-ret. dms., 1 dm. frt. equald kilo. 3.10 - —

Tricresyl phosphate, coaltar, dms., c.l., divd lb. .33 - —
dms., t.c.l., divd. lb. .36 - —
tanks divd lb .32½- —
Petroleum, dms., c.l., divd. lb. .35 - —
dms., t.c.l. divd. lb. .36 - —
tanks divd lb. .32½- —

Tridecyl alcohol, mixed isomers, dms., c.l., divd. E lb. .22½- —
dms., t.c.l., divd, E ..... lb. .24 - —
tanks, divd. E ..... lb. .20 - —

Triethanolamine, dms., c.l., divd, E. lb. .24½- —
dms., t.c.l. same basis lb. .26 - —
tanks, same basis lb. 22 - —

Triethanolamine tauryl sulfate, dms., c.l., t.l. frt. alld lb. .25½ —
dms. t.t.l. frt alld. lb. .26½- —
tanks, frt alld lb. .24½- —

Triethylamine dms. c.l., divd E. lb. .50 —
dms., t.c.l. same basis ..... lb. .51½- —
tanks, same basis ..... lb. .47½- —

Triethyl citrate, refd., tech., non-ret dms. c.l., frt. alld E. of Denver lb. .46¼- —
non-ret. dms., t.c.l., frt. alld. E. of Denver lb. .47¼- —
tanks frt alld E of Denver. lb. .43¾- —

Triethyl phosphate, dms., c.l., divd. lb. .40½- —
dms. t.c.l., divd. ..... lb. .42 - —
tanks, divd ..... lb. .38 - —

Triethylene glycol, dms., c.l. divd, E lb. .21 - —

Triethylene glycol, dms., t.c.l., divd. E lb. .22½- —
tanks, divd. E ..... lb. .18½- —
HP, tanks, divd. E ..... lb. .20 - —

Triethylenetetramine dms., c.l., divd. E lb. .48½- .48¾
dms., t.c.l., same basis ..... lb. .50 - .50¼
tanks, same basis ..... lb. .46 - —

Triisobutylene, tanks, divd. .... lb. .08 —

Triisopropanolamine, dms., c.l., divd. E lb. .23¼- —
dms. t.c.l. divd E lb. .24¾- —
tanks, divd E lb. .20¾- —

Trimethylamine anhyd., cyls., t.c.l., frt. equald, 100% basis lb. .30 .305
tanks frt equald, 100% basis. lb. .26 - —
25-40% soln., dms., c.l., frt. equald, 100% basis lb. .35½- —
dms. t.c.l. frt. equald, 100% basis lb. .35½- —
tanks, 100% basis, frt. equald lb. .26 - —

Trimethylolpropane dms., c.l., t.l., divd. E lb. .30½- —
dms., t.c.l., t.t.l., same basis lb. .31½- —

Trioxanes, pure, dms., c.l., t.l., works lb. .50 - —
dms., t.c.l., works lb. .51½- —

Tripentaerythritol ngs., c.l., t.l., divd. E lb. .34 - —
bgs., t.c.l., t.t.l., divd. E lb. .35 - —

Triphenyl phosphate bbls., c.l., frt. equald lb. .41½- —
bbls. t.c.l. frt. equald lb. .43½- —

Triphenylguanidine, bbls., works lb. .90 - —

Tripropylene dms., c.l., divd. E gal. .44 - —
dms., t.c.l., same basis ..... gal. .54 - —
tanks, same basis ..... gal. .28 - —

Tripropylene glycol, dms., c.l., t.l., frt. alld. E lb. .20½- —
dms. t.c.l. t.t.l. frt. alld. E lb. .22 - —
tankcars and compartmented tankcars, frt alld E lb. .17½- —
tankwagon and compartmented, tankwagon, 1,000 gals., min. frt. alld. E lb. .18 - —
Tripropylene glycol prices 1c. per lb. higher in west.

Trisodium phosphate (see Sodium phosphate tribasic).

dl-Trypophane, dms., 1 kilo, works. kilo.154.00 - —

Tung oil, dms., New York ..... lb. .32 - .32½
tanks, imported ..... lb. .30½- —
tanks, domestic, mills ..... lb. .30 Nom.

Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 4.25 - —

Tungstic acid tech., dms., 1,000-lb. lots, works lb. 2.25 - —
dms., smaller lots, works ... lb. 2.45 - —

Turkey red, bbls., works ..... lb. .82 - —

Turpentine, gum (see Protective Coatings market Naval Stores).
Turpentine oil NF ens., dms lb. .28 .50
Tuscan red bbls. frt equald lb. .26 .32
Tyrothricin USP, 1 to 5 kilos gram. .50 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., divd. E. of Rockies lb. .33½- .38
Ultramarine blue, jobbing types, dry, bbls., same basis lb. .18 - .19
Regular types, dry bbls., same basis lb. .25 - .40½
Ultramarine blue prices 1c higher W. of Rockies.

Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs. t.c.l. works lb. .07¾- .08
turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N.Y. lb. .08¼- —
Raw, American, bgs. works ... lb. .07¾- .08¼
Turkey-type bgs. works lb. .08½- .08¾

Undecylenic acid 55-gal dms., f.o.b. works lb. 1.29 - —

Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea 46% N, indust. bgs., c.l., t.l., f.o.b. plant ..ton.100.00 - —

Urea, feed grade, c.l., t.l., f.o.b. plant ..ton.95.00 - —
45% N, agricultural, bgs., c.l. f.o.b. plant ..ton.87.25 - —
Bulk, c.l., t.l., same basis ..ton.81.25 - —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks frt equald ton 120.00 - —
37 grade, tanks, same basis. ton.145.00 - —

Urethane, USP dms., t.l., f.o.b., works lb .65 - —
dms., t.t.l., same basis .... lb 70 - —
Uvo-ursi leaves, bls. ..... lb. .14 - .15

V

Valerian root, Belgian bgs. ... lb .32 - —
Indian, bgs ..... lb .25 - —
dl-Valine, dms. 1 kilo, works kilo.37 00 - —
Vanadium pentoxide, tech dms., works lb. 1.38 - —
Vandyke brown, bbls. works lb. 09½- .12
Vanilla beans, Bourbon, tins ..... lb. 6.75 - 7.00
Mexican cuts, tins ..... lb. 7.50 - 7.70
whole, tins ..... lb. 7.80 - 8.00
Vanillin ex ugnin, 100-lb fib. dms., 2,000-lb. lots or more lb. 3.00 - —
less than 2,000 lbs lb. 3.20 3.30
Venetian red, jobbing, bgs. works. lb. .0475- —
Venetian red 20%, bgs., works lb. .0525- —
25%, bgs., works ..... lb. .0575- —
30%, bgs., works ..... lb. 06 - —
35%, bgs., works ..... lb 0625- —
40% bgs. works ..... lb 0675- —
Vetiver oil, Bourbon, ens ..... lb.17.00 -17.23
Haitian, ens. ..... lb.10.00 -12.00
Victoria blue toner, molybdated, PMA 250-lb bbls., divd. E. of Rockies lb. 4.50 4.95
Tungstated, PTMA, 250-lb bbls., divd E of Rockies lb 5.55 —
Victoria blue toner, bbls. prices 1c higher W of Rockies

Vinyl acetate monomer, zone 1, 55-gal dms., c.l., divd lb. .1810- —
55-gal dms. t.c.l. divd lb. .1960- —
tanks, divd. lb. .1560- —
tanktrucks less than 4,000 gal., divd lb. .1610- —
Vinyl n-butyl ether, tech., dms., t.c.l., works lb. .50 - —
Vinyl chloride monomer, tanks, works, min. frt. equald E. lb. .0750- —
Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot. 1.12 - —
bots., 75cc., hospitals bot 1.56 - —
Vinyl ethyl ether tech. dms., c.l., works lb. .30¼- —
dms., t.c.l., works ..... lb. .31 - —
tanks, works ..... lb. .28¼- —
Vinyl propionate monomer, dms., c.l., divd lb. .49 - —
dms., t.c.l., same basis ..... lb. .50 - —
tanks, same basis ..... lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb 1.20 - —
1 to 9 dms., works ..... lb. 1.35 - —
tanks, works ..... lb. 1.15 - —
Vinyltoluene, dms., c.l., f.o.b., dest. frt. paid, Zone 1 ..lb. .16½- —
dms., t.c.l., same basis ..... lb. .18½- —
tanks, same basis ..... lb. .14 - —
Zone 2 prices are 1c. per lb. higher. Zone 1 is East of Rockies, Zone 2 is West of Rockies.
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Virginia type red, bbls., works lb. 1.40 - —

Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.47.50 - —
325,000 units per gram, same basis kilo.30.88 - —
250,000 units per gram, same basis kilo.23.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher
Vitamin A, liq in oil, 1,000,000 A units per gram 1,000,000 units. .07 - —
Vitamin A palmitate liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .07 - —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin) 1-50 grams vials, tins gram 45.00 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo, dms., gram. .57 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots. 1-5 kilo dms gram. .57 - —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity..gram.52.00 - —
0.1% trituration of cryst., B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.52.00 —

—*Continued on page* 00

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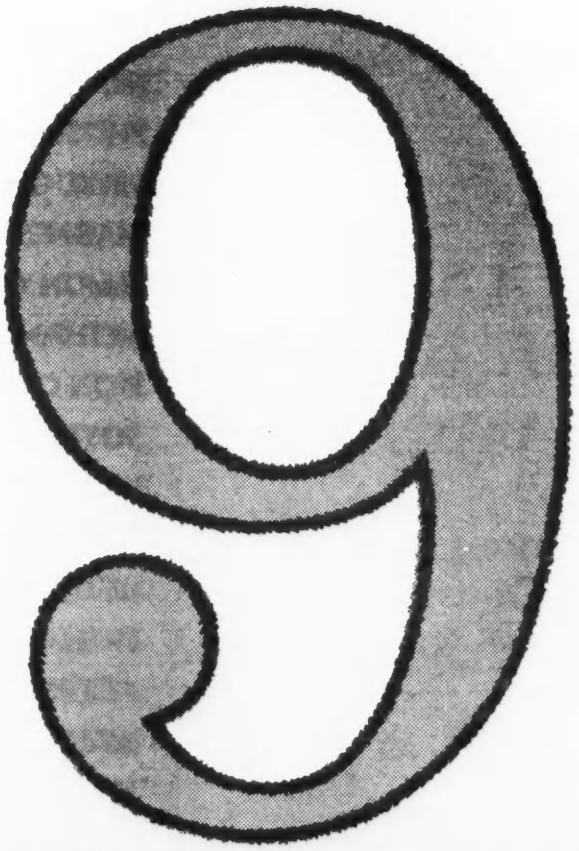

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ELEMENTAL PHOSPHORUS—Solid Growth, But Only Cautious Expansion
MONOCHLOROACETIC ACID—Import Spectre Hovers Over US Producers
PHOSGENE GOES RESPECTABLE—Reputation Gains as Building Block
VINYL CHLORIDE EXPANSION—Industry's Target: 1.5 Billion Pounds
MAGNESIUM OXIDE'S FUTURE—Potential Use in Steel Is the Key
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OIL, PAINT AND DRUG REPORTER
Reprint Department
30 Church Street, New York 7, N.Y.

Aluminum, Cut 2 Cents, Now Joins Cost-Conscious Chemical Customers

A 2-cent reduction in aluminum prices, coming on top of a substantial wage boost throughout the industry, will pare profits to the bone. For chemical makers, this means that still another industry has joined the ranks of profit-squeezed customers whose cost-price bind militates against higher tabs on raw materials. The now familiar situation has kept the price lid on chemicals moving into paper, textiles and glass. Soda ash, for example, has been stymied by the competitive situation in glass, centering on imports. Caustic soda, an important process material for aluminum, has shared the tribulations of rayon and felt the dampening influence of cost-conscious paper makers.

Price Trends

Advanced
Tin, Straits, ½c. per lb.

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Sept. 30, 1960
106.63	106.63	106.63	106.88

For Current Prices See Page 10

Similarly, a substantial price advance in chlorine two years ago was cut in half because of the paper industry's profit position.

Circumstances of last week's cut repeat those of four years ago when the Canadian producer, in a competitive thrust, reduced its prices 2 cents a pound to 24 cents.

In 1959, 7/10 cent was recovered by way of a modest increase, and later that year the balance of the 2-cent reduction was recouped.

October 1 Price Advances
Calcium Silicate, ½c. per lb.
Sodium Perborate, ½c. per lb.

Will the price cut spur new uses? No, a spokesman says. New uses are opened up by market development efforts rather than by low prices, he feels, and market development costs money. The supply of money will be drastically reduced by the price cut.

Reference to a profit squeeze calls attention to new sources of aluminum which in time may come in for more serious attention since they would eliminate reliance on imported bauxite.

Bureau of Mines has just put under way a study of the feasibility of recovering aluminum from low-grade domestic ores, which though plentiful and cheap, have proved uneconomical to process by present methods.

This is of considerable interest to chemical suppliers, as such ores would require increased quantities of process materials. According to people close to the business, an alumina production route would entail vastly increased demand for caustic soda, soda ash and burnt lime.

An acid route, on the other hand, would require increased consumption only of hydrofluoric acid, which is supplied captively by the aluminum industry.

Then, there's the alumina-from-coal-waste process currently being pioneered by a major coal company based in Cleveland, Ohio. The company had expected to have an aluminum sulfate unit, the first stage in this operation, on stream by June 1, but bad weather held up construction, and the on-stream date has been moved up to December 1.

Current plans call for construction to begin on the second stage, an alumina unit, by early 1962, with start-up following within six months.

At that point the economics of the operation are expected to come into focus, and the company will firm up plans for a major alumina facility with production capability in the neighborhood of 100,000 tons annually.

Then the firm will either embark on aluminum production itself, sell the alumina to other aluminum makers, or consider some type of joint operation, a spokesman discloses.

On top of that, the company has a hole card. There's a major market for aluminum oxide in the abrasives and ceramics field, the spokesman notes. This outlet takes the kind of low-soda alumina yielded by the coal waste route.

Mulling over the price reduction last week, trade sources found at least one thing to cheer about. Earlier forecasts of production hitting 2.1 million tons this year are likely to be fulfilled, it was noted.

In addition, shipments appear headed for 2,450,000 tons in '61, a 4 percent advance over the 1960 level, and only a little shy of 1961's record 2,480,000 tons.

The pace of shipments has quickened sharply in recent weeks, trade sources add, indicating that last week's price cut was a competitive move rather than a response to real market conditions.

Paper Production Lower

The American Paper & Pulp Association reported paper production for the week ended Sept. 23 at 91.7 percent of theoretical capacity, as compared with the revised figure of 94.6 percent for the previous week and 93.7 percent for the corresponding week of last year.

Acids

Hydrochloric—Demand now hits a brisk seasonal stride along the full range of chemical accounts, sources in the trade report. Up too is steel output, pursuing a gradual but uninterrupted recovery. Prices of hydrochloric display the usual pattern—spotty along the east coast, mostly stable elsewhere.

Hydrofluoric—Through fair diplomatic winds and foul, Atomic Energy Commission has made its presence felt in the HF market. Tonnage has been substantial, representing a major share of total US consumption.

As a corollary, the current build-up in international tension, to the threshold of catastrophe, is unlikely to affect the pace of AEC purchases, trade sources say.

Nitric—Steel is taking an increasing share of the more-than-plentiful merchant acid available on the east coast, the trade reports. Also on the upswing are chemical accounts.

At the captive end of the business, fertilizer makers are turning the crank for a brisk fall season.

Sulfuric—Pursuing its interrupted uptrend, steel production during the week ended September 23 totaled 2,114,000 net tons, the American Iron & Steel Institute reports.

This compares with production of 2,032,000 tons the previous week. Output to date in 1961 stands at 68,318,000 net tons, closing in on last year's total, now at 78,243,000 net tons.

Bases and Salts

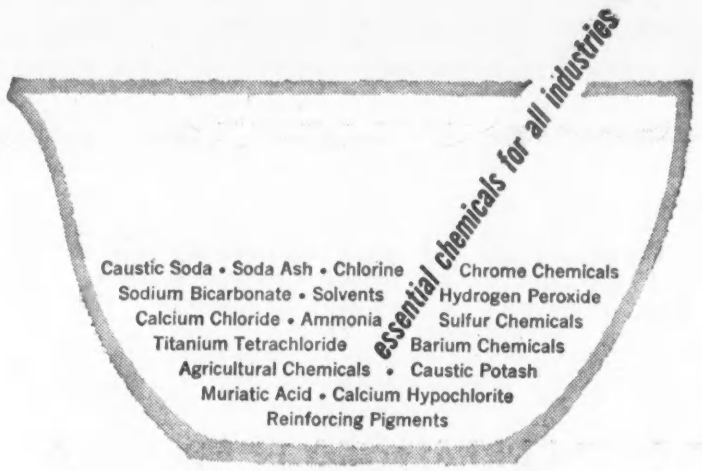
Calcium Silicate—Effective October 1, prices of hydrated calcium silicate were advanced ½ cent a pound to a level of 6½ cents.

Caustic Soda—With the recovery in paper production, shipments of caustic soda are once again at a seasonal pace. Prices of the alkali have been long unchanged, too long in the opinion of some observers, but the outlook is steady through the balance of the year.

Chlorine—PVC output is reported moving upward, carrying chlorine with it. Also showing renewed vigor are the paper industry and organic chemicals generally, the trade reports. No price change is on the horizon or in the wind, they add.

Copper Sulfate—Output in the US in July fell 24 percent to 3,524 tons, the lowest since January 1960, the Mines Bureau reports.

Shipments were 3,660 tons, down 16 percent from June, and stocks of 5,028 tons represented a 5 percent decline for the month. At the July rate of shipments,



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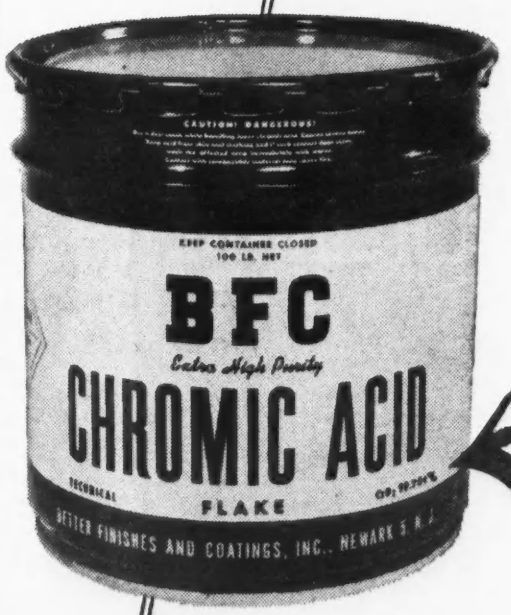

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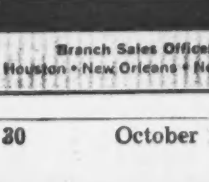

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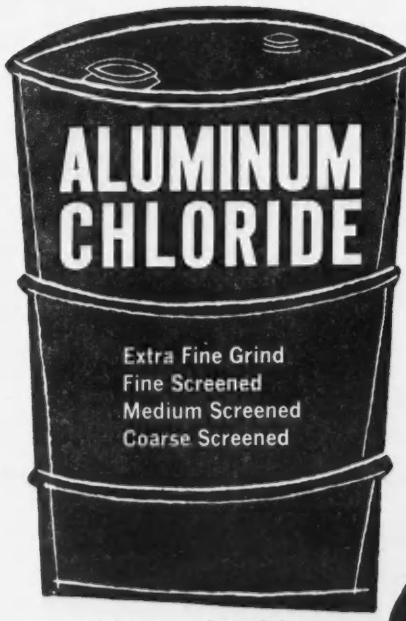

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Heavy Chemicals

inventories were sufficient for about six-weeks' requirements.

Imports in July totaled 26 tons, consisting of 17 from Britain and 9 from Canada. Exports were 1,403 tons.

Lithium Hydroxide—Prices have settled at 54 cents a pound for carlots and 58 cents for smaller shipments, reflecting the recent 5 cent cut. As reported in this space previously, the cut was one producer's response to another's low bid for a new account. The trade is none too happy with the new prices, but barring a demand fillip from AEC, it may have to live with them.

Sodium Perborate—The two domestic producers of this bleaching material raised prices ½ cent a pound on October 1 in the face of continued pressure from imports. Prices of the foreign material, shipped mostly from Britain and the low countries, are understood to be one-cent below the new domestic level.

Nonferrous Metals

Aluminum—Output of finished aluminum alloys by secondary smelters in June increased 15 percent, but shipments dropped 7 percent, the Mines Bureau reports. Stocks at month's end were up 14 percent.

Consumption and receipts of purchased aluminum scrap in June were virtually unchanged from May, Mines notes.

In a report from Business & Defense Services Administration, shipments of aluminum mill products in July are tallied at 264 million pounds net, down 13 percent below June's 304 million.

Fluorspar—US output of crude fluorspar ore in the second quarter totaled 134,000 tons; mills processed 118,000 tons fromw hich 43,200 tons of finished fluorspar were recovered, the Mines Bureau reports.

Total production of finished fluorspar was 47,568 tons, including 4,400 tons marketable as mined.

Tin—Market wobbled sideways, straits metal closing up ½c. at $1.22 a pound, spot, Friday.

Heavy Chemical Briefs

AEC LETS CONTRACTS: AEC has awarded a contract worth $696,000 to Stauffer Chemical Company for anhydrous hydrofluoric acid. To General Chemical Division of Allied Chemical Corporation go AEC contracts worth $28,564 for aluminum sulfate and $58,140 for aluminum nitrate.

BERYLLIUM BARTER—Department of Agriculture is offering to trade a group of agricultural commodities for quantities of beryllium metal and oxygen-free high conductivity copper. The beryllium must be processed in the US from raw materials produced in friendly countries. The copper may be processed in the friendly countries.

GENERAL CHEMICAL UNIT MOVES: General Chemical's technical service laboratory has been moved to new quarters at the division's Morris Township, N. J., research center. Previous site was in Edgewater, N. J.

KUWAIT DESALINIZES: The government of Kuwait, already operating a 6-million-gallon-a-day water desalinization unit, has just taken a further step in its water production program with the award of a $418,000 contract to Ionics, Inc., for a 240,000-gallon-a-day electrodialysis facility.

Hercules Starts Up Plants In Sweden, the Netherlands

Two overseas affiliates of Hercules Powder Company opened new plants last week.

At Zwijndrect in the Netherlands, NV Hercules Powder Company opened a plant designed to turn out a broad range of rosin sizes, resins, adhesives, inks, floor coverings and related products.

The Netherlands unit, under construction since early 1960, is expected to produce upwards of 30 million pounds of resin derivatives yearly.

The other unit, operated at Lilla Edet, Sweden by Hercules Kemiska Aktiebolag, will produce a complete line of paper chemicals. Initially, however, production will include only regular fortified rosin sizes.

Chemical R&D Bill

—Continued from page 4

financed with government funds totaled $303 million last year, an increase of 7 percent over the $284 million of government financing in 1958.

Private industry increased its R&D funds 12 percent between 1959 and 1960—from $665 million to $744 million.

A breakdown of these totals show that government funds for research and development of the area of industrial chemicals amounted to $297 million compared with $280 million in 1958; for drugs and medicines, $5 million compared with $3 million, and for other chemicals, $2 million compared with $1 million.

The chemical industry retained the lead over all other industries in allotment of funds for basic research performance. Last year producers spent $116 million on basic research or 11 percent of the total R&D budget. In 1959 basic research expenditures by the chemcial industry amounted to $106 million.

Monsanto's Position Clarified

Monsanto Chemical Company is a producer of polyvinyl chloride film, which finds its way into wall coverings, but the St. Louis, Mo., chemical company does not make the wall coverings itself. So reports the firm, in correction of an article which appeared in OPD on September 18. Monsanto sells the film to the wall covering trade, where it is printed and otherwise fabricated into the finished product.

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IN CANADIAN POST: R. E. Kendall, appointed to the newly-created post of Canadian project manager of United States Borax & Chemical Corporation, Los Angeles, Calif.

SOCMA Sets Seminar, October 10 Luncheon Date

Key representatives of federal government agencies have been lined up for the fourth annual seminar on tariff and custom matters sponsored by Synthetic Organic Chemical Manufacturers Association.

The two-day lecture and discussion meeting will be held October 9-10 at the Roosevelt hotel in New York.

Foreign trade policy for the United States in view of the expiration of the present trade agreements act, will be one of the featured topics at this year's seminar, SOCMA says.

SOCMA also last week issued its monthly luncheon call, scheduling the get-together for October 10 at the Roosevelt hotel. Edwin F. Rains, assistant general counsel of the Treasury Department will discuss "Customs—Future Directions."

Fuel Cell Research Pact Inked by Sun, Battery Firm

An agreement covering cooperative development of fuel cells has been signed by Sun Oil Company and Electric Storage Battery Company.

Fuel cells, converters of chemical energy directly into electricity, have the greatest immediate potential in "portable applications having moderate electrical requirements," Sun says.

Sun has conducted an independent research program in catalyst systems used in fuel cells. Electric Storage Battery is said to be a leader in the electrochemical field and in the development of electrodes for fuel cells.

Polypropylene Film Output Is Planned by Union Carbide

Plans to produce slot-cast and bi-oriented polypropylene film have been announced by the polymer products department of Union Carbide Development Company.

The film will be produced in Union Carbide Corporation's facilities at Wayne, N.J. The new processing lines are expected to go on stream about the middle of 1962. Initial quantities of the new films are now being introduced to the market.

Free Drug Samples

—Continued from page 7

and control the distribution of physicians' sample drugs, and supply physicians only with the drugs they want and will use.

- That the medical profession, through its medical societies, request their members to stop accepting physicians' samples unless they intend to use them in their practice and to destroy all samples they do not use so they will not be diverted from their intended use.
- That physicians and representatives of pharmaceutical manufacturers (detail men) discontinue distributing physician sample drugs to retail pharmacists for dispensing.
- That pharmacists discontinue using physicians' samples to fill prescriptions.
- That drug firms immediately check on their systems of accounting for new drugs for investigational use to be certain that any not used in clinical investigation are destroyed.
- That physicians and others engaged in the evaluation of new drugs destroy any stocks of investigational drugs not used.

Mr. Larrick says it should be clearly understood that the FDA does not intend to interfere in any way with the legitimate distribution of samples to physicians and their use by physicians.

"What we are concerned with is the distribution and use of physicians' samples outside their proper and intended channels which frequently results in the nullification of all safeguards provided by the federal food, drug, and cosmetic act," he points out.

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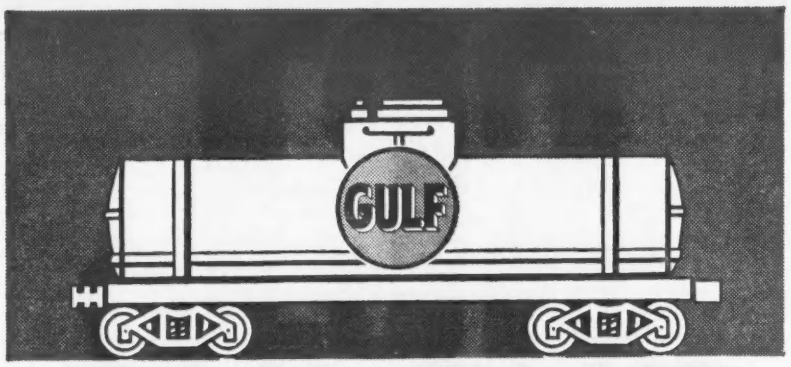

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OPD Reports From Europe

Chemical People Eye Integration

—*Continued from page 7*

companies taking large participations in the new Union Chimique.

The names most frequently mentioned are in the fiber field: Societe des Usines Chimiques Rhone-Poulenc, which already has links with Sidac and Fabelta, and Courtaulds, Ltd., the big British international fiber firm.

Rhone-Poulenc early this summer showed many European firms the new merger path when it fused into its own corporate structure many of the joint venture and partnership deals it had set up with other firms, primarily with Comptoir des Textiles Artificiels (Celtex) in the synthetic fiber field.

As a result, Rhone-Poulenc is expected to show a sales volume in the future approaching $1 billion a year, or well ahead of its nearest continental competitors.

So far most of these mergers have not included operations across national borders, activities largely left either to direct foreign investment or to joint ventures.

Some international merging, though, may be the next step for middle-sized European firms faced with the swift expansion of the major producers.

Reasons For International Mergers

Elimination of national protection systems and the fanning out of the major firms is stimulating such thoughts. Farbenfabriken Bayer AG, biggest of the German chemical companies, is pushing forward with a major complex to be built in the Antwerp region of Belgium.

This is reported to be Bayer's response to the invasion of European chemical markets by American producers through investment and joint ventures.

Imperial Chemical Industries, Ltd., has announced plans for a $300 million petrochemical-plastic complex in Rotterdam harbor which will give it a direct stake in the market. ICI also makes no bones about its general lack of interest in joint-venture deals.

Other British firms, though, aren't so sure about that and there is some considerable thought being given to joint ventures and to acquisition of small European firms by UK companies.

"We won't build on the continent directly as we see our future now," says an executive of one of the major UK companies, and he sees the future partly in terms of the possibility of attractive acquisitions of smaller companies "not big enough" alone to meet the Common Market competition.

This tactic is, apparently, based on the belief that there will always be a place for specialized chemical firms, such as the Swiss companies, and that it will take really big money—say, $300 million, for instance—to compete right down the line with huge concerns like ICI.

Many American chemical companies have been using the joint venture technic to build a foothold in the Common Market. E. I. du Pont de Nemours & Co. is an exception with its major plastics and fibers center at Dordrecht, Holland; paint operations in Belgium and Sweden, and its neoprene rubber and isocyanates in Northern Ireland.

GAF's Helm to Snyder, Siragusa Also Moves Up

John I. Snyder, jr., has been elected chairman of the board and chief executive officer of General Aniline & Film Corporation. He succeeds Thomas A. Morgan who retired from the position as chairman.

Mr. Snyder, who was vice-chairman of GAF's board, is also president and chairman of US industries, Inc. He was elected to the board of General Aniline last April and shortly thereafter was named to the executive committee and made vice-chairman.

Ross D. Siragusa succeeds Mr. Snyder as vice-chairman. Mr. Siragusa is president and chairman of the board of Admiral Corporation.

Philip M. Kinkins, president of General Aniline, will continue to serve in that capacity.

Plastic Foam Dilemma

—*Continued from page 7*

trusion systems, polystyrene is the fastest growing member of the styrene family of plastics.

"Yet, even today, there are now processing technics and applications being developed which promise an even greater future success for polystyrene foam," he said.

Taking the stand on behalf of latex foam rubber was Edward C. Svendsen, a United States Rubber Company engineer.

"Breathability," he said, "is a ventilation feature of latex rubber which yields a desired cooling effect."

This should assure the material a continued place in the overall market, he indicated.

A spokesman for Shell Chemical Company said Shell has developed "a new series of low density, rigid epoxy foams, whose features and competitive costs suggest numerous applications within the appliance, building, chemical, packaging and transportation industries."

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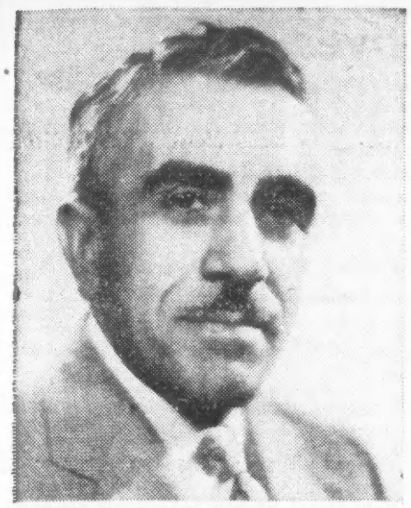

ELECTED: Dr. Amel R. Menotti, chosen chairman-elect of the board of trustees of the Gordon Research Conferences. He follows A. H. Batchelder, who is now board chairman.

Foy, Chairman of Koppers, Joins Board of Courtaulds

Fred C. Foy, chairman of the board of Koppers Company, has been elected to the board of directors of Courtaulds North America, Inc. Mr. Foy becomes the first official of Koppers to join the Courtaulds board.

J. Albert Woods, board chairman of Courtaulds North America, and Arthur W. Knight, a director of Courtaulds, Ltd., its parent British corporation joined the Koppers board last June soon after the announcement of the purchase of an interest in the Koppers common stock by Courtaulds.

Both corporations cited the stock purchase and subsequent board elections at that time as the first step in plans for exploration of areas of mutual interest, including plastics and chemicals.

PE Facility in Pakistan To Be Built by Germans

Salzgitter Industriebau and Braunschweigischen Maschinenenbauanstalt, German construction and machinery firms, respectively, have landed a Pakistani contract for a 5,000-6,000-ton high-pressure polyethlyene plant.

The Pakistan firm is Manzoor Chemical & General Industries, Ltd., of Karachi. According to German reports, the plant will be based on ethylene made from alcohol produced from fermentation of molasses. The plant is to be in operation by the end of 1963.

Metals Import Probes Called for by the Senate

The Tariff Commission will be conducting investigations into imports of lead, zinc, mercury, fluorspar, manganese, cobalt, and beryllium during the next year at the direction of the senate.

A resolution calling upon the commission to make investigations into the conditions of domestic producers of these metals and minerals was passed by the senate just before adjournment last week.

Investigations of lead, zinc, mercury and fluorspar are for the purpose of bringing previous studies of conditions in these industries up to date. The commission is to report to congress on these studies not later than May 15, 1962. The probes into manganese, cobalt and beryllium are new studies and are to be reported on by August 31, 1962.

German Chemical Concerns Linking Up With Japanese

German chemical firms are linking up with Japanese firms and some reports already talk of competition between Japanese companies with German links and those with American.

Farbenfabriken Bayer AG has an agreement with Edogawa Chemical Company, Ltd., covering processes for the production of polycarbonate plastic resins. The German Henkel firm is supplying Mitsui Petrochemical Company, Ltd., with a process for production of terephthalic acid.

And Farbwerke Hoechst AG has a joint venture with Nippon Synthetic Chemical Industry to produce vinyl acetate emulsions. The joint company is called Hoechst Gosei Company, Ltd.

Carbide Fills Nuclear Post

Clarence E. Larson has been appointed a vice-president of Union Carbide Nuclear Company and general manager of Oak Ridge, Tenn., operations. He succeeds Clark E. Center, who will continue as a vice-president on special assignment. Dr. Larson's association with the Oak Ridge operations extends back to 1943 when he became head of the technical staff of the "Y-12" production and research plant.

Pfizer Absorbs Globe

—Continued from page 4

Globe for 44,000 shares, representing a market value of $1.8 million.

Alcon, a smaller Fort Worth drug maker, then stepped into the picture with an offer of $20 a share for up to 75 percent of Globe's outstanding stock.

"The field of animal biologicals," a Pfizer spokesman recently said, "opens a new direction in the company's research and diversification program."

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Alpco 400	Amber	181	54	100
Alpco 431	Light Amber	183	46	112
Alpco 434	Yellow Amber	185	41	120
Alpco PX-100	Black - Brown	187	42	113
Alpco AX-200	Brown	187	48	141

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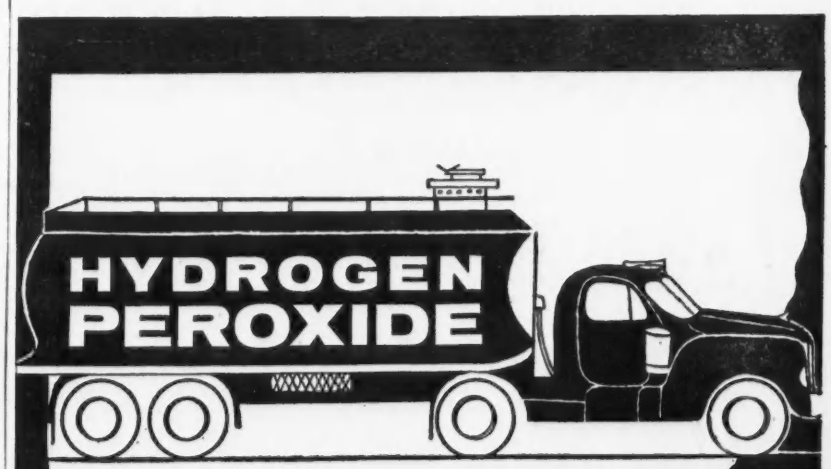

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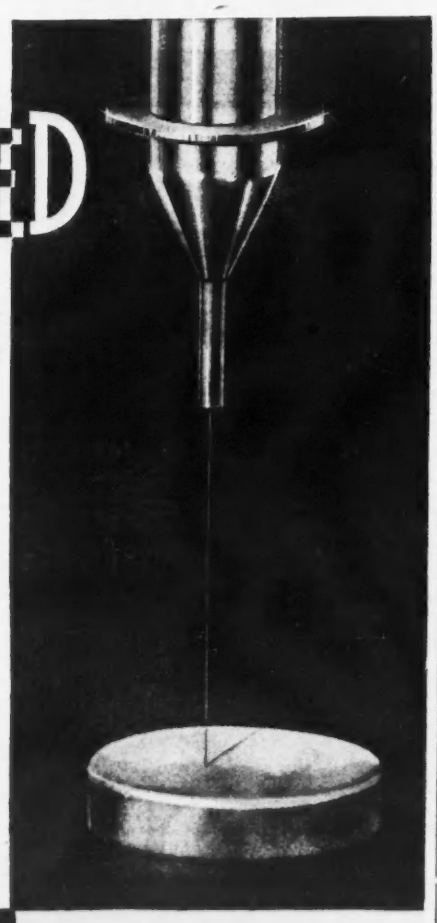

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Petroleum Derivatives

Supplies of all petroleum derivatives were comfortable last week, with shipments moving promptly against a well sustained demand which is manifesting a seasonal fall increase all across the board. Paint and other solvent consuming industries saw September as a month of increased business volume which is expected to continue on an upward curve well into the fourth quarter.

Solvent business in the pure aromatics is beginning to feel the anticipated effects of new model production in the automotive field. What is now a slight increase in demand from that quarter will in a matter of weeks be growing into very considerable increased business volume.

Cosmetic manufacturers are stepping up production in anticipation of a good Christmas season, and this leads to early Fall business gains for white oils and petrolatums. Pharmaceutical demands are due for a moderate seasonal uptrend.

Shipment of waxes to the food packaging field are moving in routine fashion in well established large volume business. Competitive effects from certain low cost plastics are being felt, but waxes continue to hold their own, both straight and in blends with synthetics.

Aliphatic solvents sales to the protective coating, dry cleaning, and other large consuming industries are moving in seasonally larger volume under steady and unchanged price patterns. Light pressed gases and light refinery gases are holding up well, and increased demand during the months ahead for butane and the like, for cold starting gasolines is soon to become a significant factor.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Sept. 30, 1960
104.13	104.13	104.13	103.74

For Current Prices See Page 10

Aliphatic Solvents

Hexane—Demands from producers of vegetable oils by the solvent extraction process are reported well sustained. Lacquer diluent demands are just about as they had been, but a Fall pick-up is expected. Price patterns remain unchanged.

Mineral Spirits—The Fall pick-up in the paint business is underway, and along with it goes the consumption of mineral spirits which is the largest volume single solvent used by the paint industry. Supplies are amply available to meet all calls with prompt shipment. Present price structures are expected to hold for the balance of the year.

Stoddard Solvent—Mineral spirits meeting the specifications for Stoddard solvent are comparably priced with regular mineral spirits in most consuming areas. Mild demand is being readily met with prompt shipment.

VM&P Naphthas—These faster evaporating aliphatic solvents are in quite ample supply. Shipments are moving promptly into consuming channels under price patterns that have long been established. Demand is reported as well sustained, with a pickup in demand becoming evident as the fourth quarter approaches.

Aromatic Solvents

Benzene—Overall, the market position of both pure and industrial grades of benzene is one of plentiful supplies moving in large volume under a firm price structure. Within this overall pattern, the situation is that no one is going without benzene. While certain producing companies may in certain instances be currently hard pressed to fulfill contract commitments, any consumer of benzene can go out in the open market and pick up any extra benzene he may need at no premium in price and with fast delivery. There are no geographical dislocations in the supply picture sufficient to have any real adverse effect.

The outlook for benzene, barring a large scale war, is for continued ample supply, more on the easy side than anything else, for the next year or two. With more production capacity still to come, the easy supply situation could extend beyond that. However, taking the long point of view, stepped up demand over the next three years is likely to see present and planned capacity, at the end of that time, pretty well in full operation.

Production of benzene by petroleum processors in July was reported by the Tariff Commission as amounting to 35,216,519 gallons, as compared with the June output from petroleum sources of 31,653,023 gallons. This brought the total July output of benzene from all sources to 45,422,588 gallons.

Toluene—Total July production of toluene from all sources was reported by the Tariff Commission as amounting to 22,006,695 gallons, against the June production of 21,032,015 gallons. Petroleum source production of toluene in July stood at 19,268,005 gallons, compared with the revised figure for June of 18,277,280 gallons. Of the July total cokeoven operators turned out 2,521,680 gallons and tar distillers 217,010 gallons.

Xylene—A well sustained interest in xylene as a solvent is reported, and present price patterns are felt likely to hold. The most active interest in xylene currently is not in the steadily growing but well established solvent end uses, but rather in the isomers. More and more xylene producers are interested in separating and marketing the isomers and developing chemical intermediate uses for them.

However, the status of isomer markets at present is somewhat less exciting than it had been—hence the interest in developing new chemical outlets for them.

Current isomer capacities are estimated at around 188,000,000 pounds for o-xylene, 205,000,000 pounds for p-xylene and 50,000,000 pounds for m-xylene. Expansions are slated to take place raising 1962 capacities to 627,000,000 pounds of ortho, 310,000,000 of para, and meta to stay about where it is. Some of these expected ortho capacities announced may well be called off, for the ortho outlook is much more bleak than it had been, because of the petroleum naphthalene production capacity planned and under construction. If all naphthalene facilities are completed, naphthalene capacity will be about three times the consumption level currently. Most domestic phthalic anhydride makers prefer naphthalene to o-xylene as a raw material, which means that the marketers of o-xylene will have to rely mostly on export markets, which are insufficient to justify the announced expansion in ortho.

The combined output of xylene by petroleum sources and by tar distillers in July was reported by the Tariff Commission as 25,885,805 gallons, as compared with the June revised production figures by these makers of 23,214,410 gallons. Cokeoven operators produced 593,206 gallons of xylene, bringing the July total to 26,479,011 gallons.

Crude Oil Stocks Climb

Domestic and foreign crude petroleum stocks at the close of the week ended Sept. 16 were 3,411,000 bbls. higher than at the end of the preceding week.

Week ended Sept. 16—248,070,000 bbls.

Preceding week—244,659,000 bbls.

This increase comprises an increase of 2,887,000 bbls. in stocks of domestic crude, and an increase of 524,000 bbls. of foreign crude.

(Source: Bureau of Mines)

Local Prices—Local tankwagon delivered prices listed for October in the Metropolitan area are as follows on certain key solvents:

		N.J.	N.Y.C.
Acetone	lb.	$0.07½	$0.07⅛
Benzene	gal.	.38	.38
Butyl acetate	lb.	.15	.15
n-Butyl alcohol	lb.	.16	.16
Heptane	gal.	.23	.23
Hexane	gal.	.23	.23
Isobutyl acetate	lb.	.13¼	.13¼
Isobutyl alcohol	lb.	.13⅛	.13⅛
Methanol (2,000 gals. min)	gal.	.35	.35
Methyl ethyl ketone	lb.	.13	.13
Mineral Spirits, regular	gal.	.19	.19
Mineral spirits, odorless	gal.	.35	.31½
Toluene	gal.	.31	.31
Xylene	gal.	.34	.34

Propylene Relying Heavily on Plastic To Reach the 3-Billion-Pound Class

A major propylene producer in the Delaware Valley will boost its capacity by 150 percent, to 300 million pounds a year by the second quarter of 1962. This portends a short-term market disruption in the area, since propylene from other sources is also freely available. Furthermore, the 180-million-pound expansion in the East has set market observers to wondering generally whether propylene demand, even spurred by the optimistic outlook for polypropylene, will reach its forecast 3-billion-pound-a-year market level by 1965. This year propylene production probably will hit or slightly exceed 2 billion pounds but a substantial gain in '62 or even '63 is not at all assured.

(Sources close to the market caution on the use of the Tariff Commission report. For 1960, to cite an example, this shows output of propylene for chemical conversion at 2.4 billion pounds—a gross exaggeration stemming from faulty reporting methods, it's said.)

Without a doubt, the heaviest bets are on polypropylene. Output of the resin was 41 million pounds in 1960, less than anticipated but still double that of '59, and the 100-million-pound mark may be reached this year.

Running way ahead of demand, high-purity propylene capacity, in place or abuilding, is estimated to be in the vicinity of 750 million pounds. This figure includes 80 million pounds of propane-propylene mix that two oil refiners have contracted to nearby manufacturers of polypropylene—one is located in West Virginia, the other in California—who themselves upgrade the material to polymer specifications.

There is, in addition, 200 million pounds of high-purity propylene that is destined to go into the manufacture of polyisoprene and other chemicals for synthetic rubbers. Nonetheless, when the contract runs out, it could be channeled to polypropylene.

Other areas where growth is most promising today are, like polypropylene, still far from developed. Polyethers for use in urethane foams are definitely a growth factor, however, because the end-area clearly is. The same might be said of oxo alcohols and aldehydes for use in the manufacture of plasticizers and anionic surfactants—the latter with reservations, for while the anionic group are produced in increasing quantities, their percentage of the total surfactants market is becoming smaller.

Cumene Utilization Rising

Use of propylene in the production of cumene should also rise steadily in coming years. Cumene has had an enviable growth rate already—output climbing from 33 million pounds in 1954 to 218.7 million in 1960—and phenol requirements will continue to spur output.

Phenol demand, in turn, will be prodded by polycarbonate resins, epoxies (bisphenol A), etc. But acetone, a byproduct, of the cumene-phenol process as well as an IPA derivative, holds no such promise.

Acrylonitrile poses many problems, but at least a few plus factors as far as propylene utilization is concerned are visible. The first is that the maker of the largest-volume synthetic fiber, "Orlon," is producing at least half of its total acrylo requirement via propylene.

The second is that the ammonia-propylene route only recently introduced is generally considered to be the most efficient process, giving rise to speculation that it will at a later date be licensed to other manufacturers.

The disturbing fact is that acrylonitrile production declined last year. It was a very slight dropoff, of course, and lower prices, which went into effect last summer, could reverse the trend and encourage usage in such potential growth areas as styrene-butadiene-acrylonitrile terpolymers.

October 1 Price Advance

Trichloroethylene, ¾c. per lb.

Price Trends

Advanced

None

Reduced

Molasses, N.O., ½c. per gal.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Sept. 30, 1960
130.02	130.02	130.05	131.20

For Current Prices See Page 10

Acrolein and polyisoprene are still something of curiosities. While the developers of these chemicals are extremely optimistic—acrolein, for instance, is looked upon as the ethylene oxide of tomorrow—it would be premature to make any definitive forecasts.

Isopropanol, the largest single end-area for propylene, and, in turn, its major outlet, the manufacture of acetone, offer little if any growth. In fact, production of both chemicals could decline this year. Furthermore, the solvents picture, in general, is darkened by new developments in paint technology. Spraying and dipping require more solid and less volatile paints; also, water-base emulsion paints are moving outside the home and into a new market.

Production of dodecylbenzene has declined since 1958 and a reversal in the downtrend seems unlikely (OPD, 7/24/61). As a detergent feed stock, it has lost out because of sewage disposal problems presented by alkyl benzene sulfonate.

Glycerine demand is not expected to contribute significantly to an increase in propylene production. Not only do synthetic producers have to compete vigorously with the soapers, but they also are faced with keen competition from makers of other similarly-used polyols.

Propylene Supply Is Huge

Although there are so many demand factors to assess, supply involves no detailed analysis. Some 22 billion pounds are available, with more than 90 percent coming from refinery cracking operations and the remainder a co-product of ethylene production. Almost ten times the chemical requirement is available on the East Coast alone, which presumably makes for a very attractive price, be it low grade or high purity material.

One substantial producer of high-purity propylene, for example, has lost both of its polypropylene customers—one as a result of back-integration, the other through a relocation of the buyer's facilities.

What clouds the view and accounts for a disparity in near- and long-range outlooks are these two facts—conclusions drawn from a projection of propylene utilization in principal end-markets in coming years: First, potential growth is greatest in areas that are today only in the initial stage of development; second, the largest-volume outlets, almost or already fully mature, show no promise of improving markedly with age.

Adipic Acid—The 3¼c. a pound price decrease, announced early last month, is expected to spur development of other than nylon/66 usage. At the same time, of course, it provides nylon/66 manufacturers with a cheaper intermediate.

Market development is obviously needed if consumption of adipic is going to be running parallel with production capacity. This will go to approximately 400 million pounds with the completion of a facility now abuilding at Louisville, Ky.

The latest entrant into the market will use its adipic output captively, it's believed, and primarily for synthetic lubricants manufacture. Today this is about a 4 million pound market for adipic.

More important outlets, in terms of volume, are adipate plasticizers and polyesters for urethane foams.

Methylene Chloride—Two major producers of methylene chloride which early last month informed customers of an October 1 price advance of ½c. a pound, rescinded their announcements last week.

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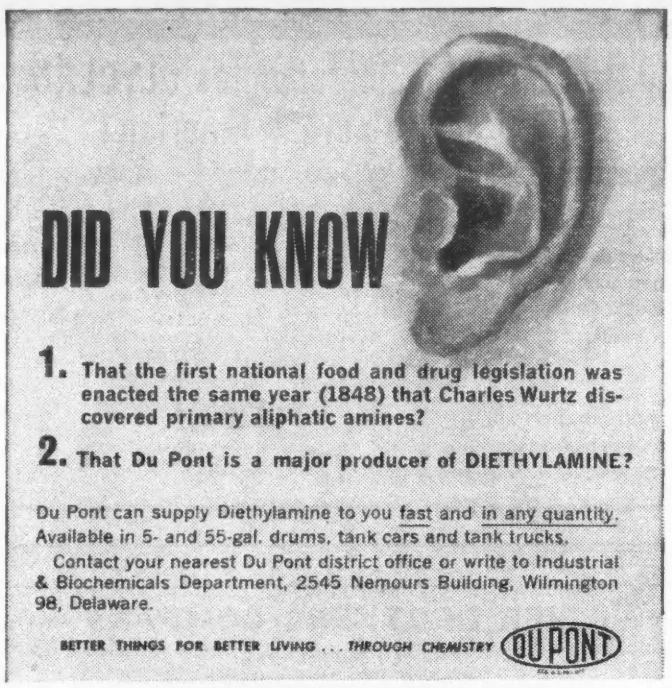

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Aliphatic Organics

Their motives in doing so were understandable. As October 1 neared, it became obvious that some competitors were of no mind to boost prices.

Methylene chloride is and has been a highly competitive market. In addition to adequate domestic capacity, imports exert considerable pressure. There is also a very lengthy roster of suppliers—both domestic and foreign—to complicate the situation and, for people in the business, to keep tabs on.

Several usually well-informed trade sources contend that competition is centralized among US manufacturers themselves and that imports are really a negligible factor. Only application open to foreign methylene chloride, they say, is paint removers and even in this area domestic material has an advantage.

Sophisticated customers who want to get the most for their money reportedly are purchasing refrigeration grade methylene chloride these days because it no longer carries a purity premium and even though it is not required in the manufacture of paint removers.

Current prices, set up by a 1c. a pound reduction early in '61, are called unrealistically low, but apparently a price advance is still in the indefinite future. Failure of the industry to adopt the announced higher schedule at this time makes it still more unlikely that any early 1961 attempt to advance prices would be successful.

If the methylene chloride situation is indicative of things to come, the outlook for increased profits in the organic chemicals industry is not terribly favorable.

Molasses—Imports of industrial and feed molasses during July totaled 22.6 million gallons. This is about 16 percent less than import volume in June and 55 percent less than that of July 1960.

Cumulative imports for the first seven months of the year were 166.4 million gallons, as opposed to 294.4 million gallons during the comparable period in '60.

Principal sources of imports in July were, in millions of gallons: Mexico, 8.8; Dominican Republic, 5.3; French West Indies, 2.4; Indonesia, 2.3; and Philippine Republic, 1.02.

US exports of industrial and feed molasses totaled 100,000 gallons in July. The entire quantity was shipped from the mainland. Most of it went to Canada, with small amounts to Sweden and Bermuda.

Feeding cane molasses prices were off slightly on the Gulf but held mostly steady in other areas during the week ended September 27, according to Agricultural Marketing Service. At New Orleans, a mostly price of 14c. a gallon was noted but a few quotations ranging from 13½c. to 13¾c. were also reported.

Pentaerythritol — The market remains highly competitive, but since late last May, prices have been maintained at the lower levels established at that time.

Technical pentaerythritol and mono-PE are both quoted at 29c. a pound in carloads of bags, at 30c. a pound for lesser quantities, delivered anywhere in the US.

The traditional west coast differential was dispensed with simultaneously with the price drop. Consequently, west coast suppliers have a transportation advantage over their competitors in the East where the big producers are located.

Trichloroethylene—Although the methylene chloride advance isn't going to go through on October 1, as scheduled by two large producers, all indications are that the trade is adopting the higher schedule for trichloroethylene, as initiated by one of the same firms on August 29.

The increase amounts to ¾c. a pound across the board and thus restores part of the 1½c. a pound reduction posted late in 1960. Trade sources, while somewhat surprised by the price announcement, nonetheless feel it is long overdue as far as costs are concerned.

The unassessable factor throughout, of course, is import competition. Should importers fail to advance prices in line with those of domestic product—maintaining the prevailing differential, naturally—it's going to be tough to keep prices stable at the higher levels.

Vinyl Chloride—A 100-million-pound-a-year polyvinyl chloride plant is going up on a sixty-acre site on the Delaware river, west of Burlington, N.J.

Within nine months, reportedly, the first of two 50-million-pound units will be on stream. Construction of the second unit will begin within a year.

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See page 17 for new Pfister

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DDT Output Is Hitting New Highs; African Market Poised to Expand

DDT production and exports are booming to new all-time highs this year as output is projected at 190 million pounds with exports likely to climb to 140 million pounds on the basis of first-half 1961 results. And with this upsurge, the last remaining undeveloped overseas market—Africa—appears set to become a heavy volume consumer. What this means to US producers of DDT is clear enough when the potential African demand is examined. Of Africa's 155 million people, 139 million live in areas where malaria is indigenous. Anti-malaria programs, including advanced and pilot projects, now cover only some seven million people, leaving 132 million Africians who as yet have not come under any type of DDT protection.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Sept. 30, 1960
110.18	110.18	110.18	111.14

For Current Prices See Page 10

Groundwork has already been laid for large-scale DDT application in Africa. Under the auspices of the World Health Organization, eleven pilots projects have been operating in tropical Africa since 1959. The results achieved with DDT in the interruption of transmission of malaria in these regions has been so successful that WHO believes the time has come to convert the pilot projects, which last year covered four and a half million people, to either mass eradication programs or to pre-eradication programs.

The African DDT market is not expected to blossom overnight but already the decision to switch from pilot projects to mass eradication programs has resulted in a huge increase in DDT sales to African nations, if only on a percentage basis.

October 1 Price Advances

Ammonia, anhydrous and acqueous, $8 per ton
Ammonium nitrate, $3 per ton
Nitrogen solutions, 6c. per unit-ton
Potassium sulphate, (min. 50% K_2O) 5c. per unit-ton
Urea, $4 per ton

While in all of 1960 only 546,000 pounds of DDT were exported to the African continent from the US, first-half 1961 exports topped 2.8 million pounds with the final annual total sure to be upwards of 7 million pounds.

Acceleration of US exports to Africa is really expected to make a mark next year when Egypt begins its so-called "attack phase" on malaria. This particular program is scheduled for a period of eleven years ending in 1973, it is hoped, with complete eradication of the disease. Cost of the program will be $48.2 million, of which $9.6 million is slated for DDT and equipment.

Best prospects among African nations for DDT producers are those countries with technical and administrative personnel capable of handling comprehensive anti-malaria campaigns. Egypt, Nigeria, Ethiopia and Liberia are foremost among the nations able to provide the financial and technical assistance necessary for large-scale programs, although even these nations depend in part upon outside help.

While not ruling out the newly-emerging nations of Central and Equatorial Africa as strong markets, the lack of economic and political stability in these countries and their heavy dependence upon international aid, does not favor them as immediate prospects.

Animal and Plant Foods

Price changes noted below are effective October 1. However, OPD's market quotation pages carry prices effective September 29. New postings will be carried in the October 8 issue.

Anhydrous Ammonia—Up $8 per ton in tankcars to a level of $92, freight equalized East of the Rockies, went anhydrous ammonia price on October 1.

Output of synthetic anhydrous ammonia in July was 11,532 short tons, as against 42,503 short tons in June. Stocks on July 31 were 176,317 tons, as compared with 121,129 tons on June 30.

Ammonium Nitrate—Price of ammonium nitrate 33.5%N, domestic and Canadian, in bulk, moved up $3 to $61 per ton effective October 1 for the October-December period, f.o.b., works.

Bagged material also rose $3 on October 1, raising its listing to $67 per ton, to be effective for the October-December slot, f.o.b., works.

Nitrogen Solutions—From the discounted price of $1.26 per unit N for August-September, nitrogen solutions are moving up on a seasonal basis October 1 to $1.32 in tankcars, f.o.b., works.

Potassium Sulphate—Up 5c. per unit ton effective October 1 is the price of potassium sulphate, minimum 50% K_2O. New price for the October-December period is 70.5c. per unit ton. For material contracted for before July 1, 1961 add 2c. per unit in bulk and $1.20 per ton in bags.

Urea—Bulk urea, 45%N, domestic and Canadian, rose $4 a ton on October 1, to $85.25 a ton. Bagged material also advanced $4 a ton making the new price for October-December $91.25 a ton.

Agricultural Chemical Briefs

INSECTICIDE BIDS ASKED: Bids have invited by the Congolese Ministry of Public Health for insecticides and sprayers costing about $40,000. Included are 30 tons of 75 percent wettable DDT, 15,000 liters of emulsifiable solution of 25 percent DDT and 100 sprayers with capacity of 12 to 15 liters. Bids should reach M. Le Secretaire Permanent du Conseil des Adjudications du Government Central de la Republique du Congo, BG 10 CC, Leopoldville-Kalina before October 11.

Pesticides Production: July

Following are production statistics reported by the Tariff Commission representing the number of pounds of selected pesticides produced during July, 1961 and July, 1960, together with production totals for the first seven months of 1961 and the similar period of 1960. Totals may include in some cases partially estimated volume.

	July 1961	*July* 1960	*First Seven Months* 1961	*First Seven Months* 1960
DDT	14,918,435	13,531,409	104,105,662	92,027,736
2, 4D	3,516,360	2,787,482	26,105,662	24,149,616
Ester & Salts	1,673,047	1,859,844	17,180,943	20,326,792
Acid equivalent	1,145,354	1,270,468	12,793,852	15,195,556
BHC	1,771,020	1,589,670	19,363,969	25,508,447
Gamma isomer	587,151	514,761	5,696,490	4,731,225
2,4,5-T	573,162	499,135	3,621,669	3,864,427

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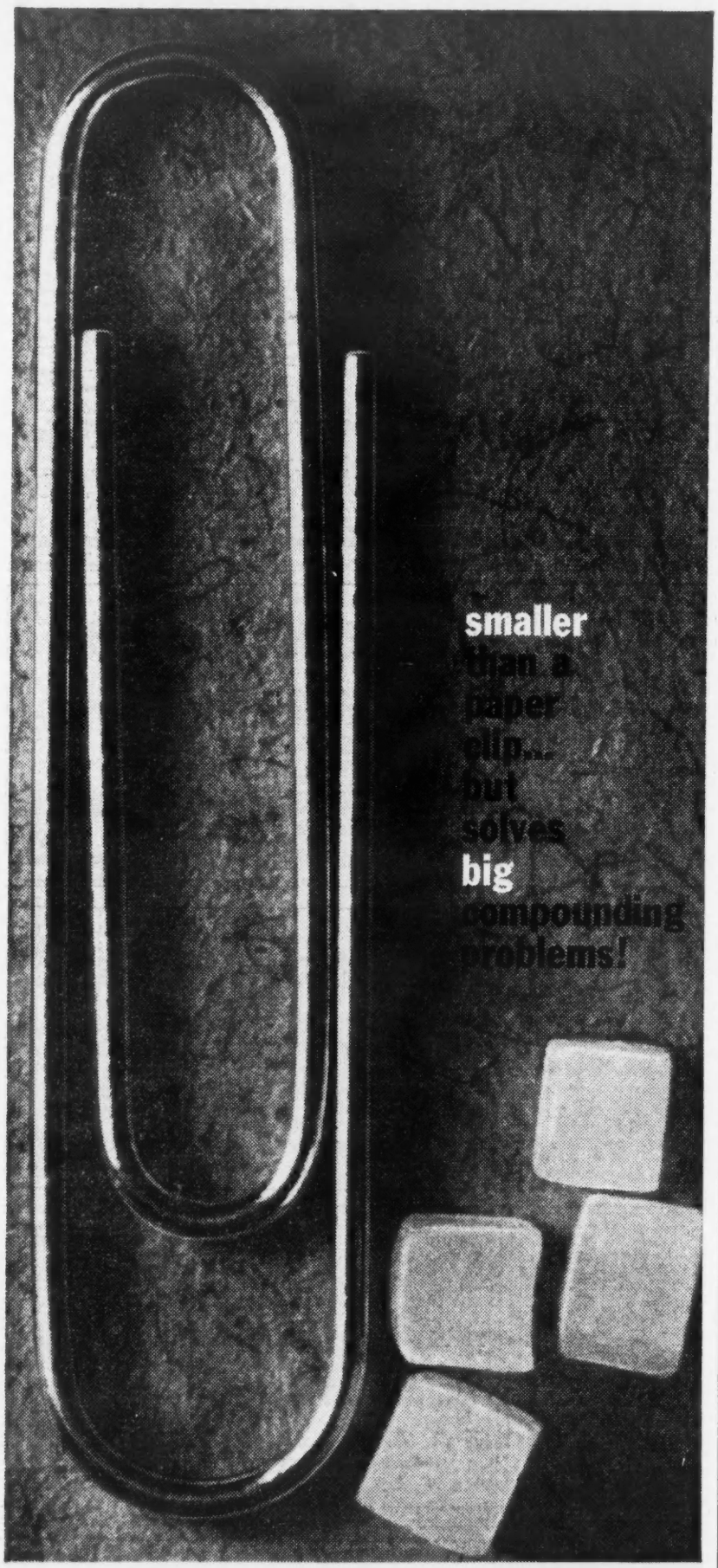

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Coal Chemicals

After a flurry of mid-summer price reductions for benzene, phthalic anhydride and phenol, the only fourth quarter change noted as of September 29 was a 3/100 cent advance in the tankcar price of styrene monomer. Moving up on the basis of the terms of the quarterly escalation clause, the new bulk price of styrene monomer is 11.03 cents per pound. Carlot and less carlot amounts are unaffected by escalation changes. No other chemicals appear to be in price danger, although some trade reports indicate phthalic is moving at weakened prices on the dealer level.

Market conditions remain basically unchanged from previous reports. Benzene is amply supplied with new capacity reported added in late August via "Udex"; naphthalene is still tight though improving; pyridine is tight as is a-picoline; cyclohexanone is in good demand while cyclohexanol is gaining after a poor start this year, and phthalic remains loose.

Production of selected coal chemicals in July displayed mixed gains and losses.

Among those chemicals scoring significant advances in output over the preceding month were:

Styrene monomer—up 9.2 million pounds.

Naphthalene—up 7.6 million pounds.

Xylene—up 6 million gallons over the preceding month's adjusted total.

Benzene—up 3.8 million gallons.

Aniline—up 2.1 million pounds.

Monochlorobenzene — up 2 million pounds.

On the down side were:

Phenol—down 5.1 million pounds.

Dodecylbenzene — down 1.9 million pounds.

German production of coke, tar and crude benzene displayed moderate gains in 1960 according to trade reports. Coke output rose 4 percent over 1959 to a total of 44,754,000 metric tons; tar production also gained 4 percent, rising to 1,803,000 metric tons in 1960, and crude benzene production climbed 6 percent last year to a total of 556,000 metric tons.

Breakdown of other German basic products in metric tons follows:

Benzene precursor—417; motor benzene—170,299; 90 degree benzene—2,326; industrial benzene—5,185; pure benzene —327,729; industrial toluene — 6,186; pure toluene 11,938; industrial xylene——560; pure xylene—8,344; solvent naphtha—6,216, and heavy benzene—5,863.

Phenol production totaled 106,370 metric tons in 1960. Synthetic phenol output was 89,056 metric tons; natural phenol from cokeovens—15,953 and other—1,361.

W. German cresols and xylenols production totaled 26,328 metric tons last year. Cokeovens accounted for 24,713 and other—1,615.

Imports into Germany of phenol, cresols and xylenols totaled 16,477 metric tons while 31,130 were exported.

Steel production scored a major gain in the week ended September 23, advancing four percent over the preceding week's output.

Net volume produced was 2,114,000 tons.

Based on assumed 1961 steel capacity, rate of production for the week was 73.3 percent.

Production for the year through September 23 was 68,318,000 tons, 12.7 percent below output in the comparable 38 week period of 1960.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100 = 1949 average)

Last week	Prev. week	Last month	Sept. 30, 1960
119.85	119.85	119.86	118.28

For Current Prices See Page 10

Basic Products

Benzene—Ample supply of benzene at continuing stable prices is the report of most producers.

Supply received a further boost late in August when a "Udex" plant capable of turning out 12 million gallons of benzene went on stream at Catlettsburg, Ky. Unit is operating commercially and shipping material.

Up 3.8 million gallons from the preceding month went benzene production in July.

From all sources output was 45.4 million gallons, highest since the 46.4 million gallons turned out in May.

By source, production was:

Petroleum processors—35,216,519 gallons, up 3.5 million gallons from June.

Coke oven producers—9,605,960 gallons, down 300,000 gallons from June.

Tar distillers—600,109 gallons, up that amount after registering no production in June.

Total output for the first seven months of 1961 was 294 million gallons, some 38 million gallons above the production total of the same period last year.

In the first seven months this year petroleum processors have turned out 225 million gallons, or 76.5 percent of all production.

Coke oven operators produced 64 million gallons, or 21.7 percent of the total.

Tar distillers trailed with 5.3 million gallons, or 1.8 percent of the total.

Naphthalene—Current supply is reported improving maginally on the basis of higher steel rates. Steel output in the third week of September hit a sixteen month high bringing much encouragement to consumers and producers alike.

Continued flow of imported naphthalene is also an optimistic sign.

Naphthalene production in July was the highest monthly total of the year, amounting to 47.3 million pounds, an increase of 7.6 million pounds from June and a rise of 4.8 million pounds from July 1960.

Production through the first seven months of the year at 258.5 million pounds ran 28.2 percent behind the 331.1 million pounds turned out last year in the same period.

Phenol—Slack business was reported in the first two weeks of September, caused by the auto contract talks and the Labor Day holiday.

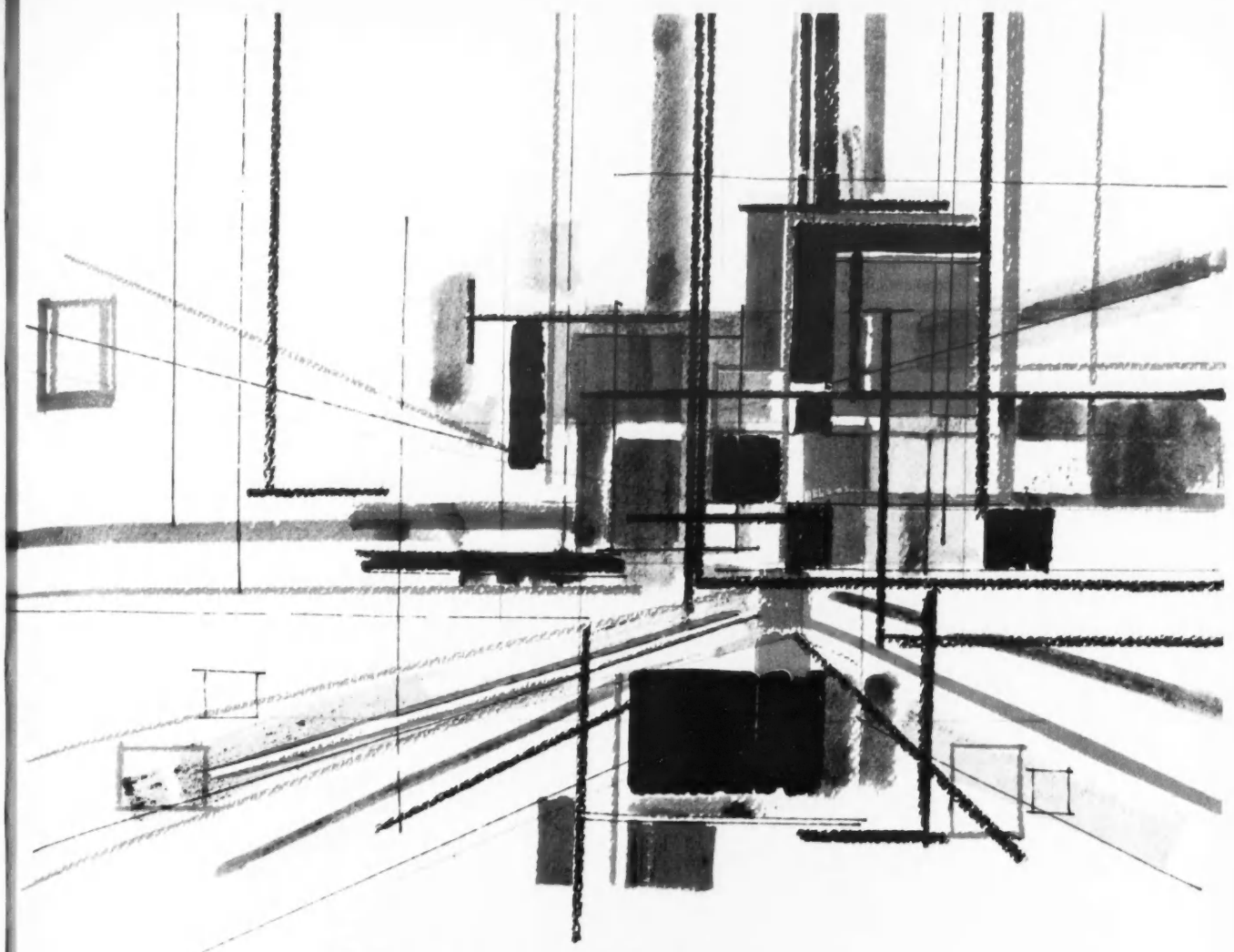
Situation was a temporary one, producers say, and though reports are not in

Aromatic Chemical Output: July

Figures for benzene, xylene and toluene include cokeoven operators, tar distillers and petroleum operators. Creosote oil statistics include distillate as such, and creosote content of solution, on 100%-creosote basis.

		July 1961	*July* 1960	*First Seven Months* 1961	*First Seven Months* 1960
Aniline	lbs.	12,803,503	7,598,937	74,757,009	75,969,637
Benzene	gals.	45,422,588	34,535,135	293,935,368	256,228,913
Creosote, dead oil	gals.	8,778,276	6,328,301	54,469,053	55,423,760
Cresols, m-p and o-m-p fractions	lbs.	3,795,201	4,360,390	26,978,659	27,618,563
Cresylic acid, refined, all sources	lbs.	4,638,663	4,314,808	39,121,178	33,448,527
Dodecylbenzene	lbs.	35,907,874	34,646,516	268,870,848	259,034,031
Monochlorobenzene	lbs.	44,018,935	51,305,743	286,525,061*	356,129,402
Naphthalene, crude	lbs.	47,254,239	42,536,326	258,486,522	331,066,531
Phenol, tech and USP	lbs.	65,336,743	63,005,896	447,793,445	452,566,431
Phthalic anhydride	lbs.	32,951,951	30,612,206	220,525,926	225,487,942
Pyridine, refined 2°	lbs.	308,863	138,213	1,571,121	1,519,102
Styrene monomer	lbs.	150,970,915	147,533,226	965,554,961	1,015,936,016
Toluene	gals.	22,006,695	24,652,880	172,315,691*	150,663,555
Xylene	gals.	26,479,011	28,368,931	181,090,181*	171,726,452

* Revised. Source: Tariff Commission.



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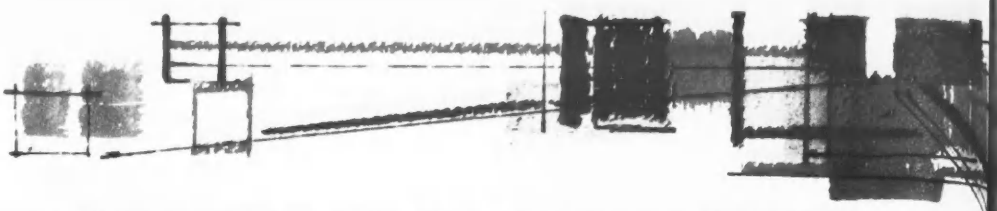

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Apparent Molecular Weight	240
Bromine Number	0.10
Aniline Point	48.5°F
Refractive Index at 68°F	1.4885
Flash Point (C.O.C.)	260°F
Appearance	Water White
Boiling Range	535—603°F

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Minimum Activity	93%
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Pour Point	Less than —5°C

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CONOCO Sulfonic Acids — **Sodium Toluene Sulfonate (Liquid, 40% active)**
CONOCO C-50 Slurry — **Sodium Xylene Sulfonate (Liquid, 40% active)**

ALFOL® alcohols are a homologous series of straight-chain alcohols containing even numbers of carbon atoms. Their molecular weight range includes l-hexanol (ALFOL 6) up through 1-eicosanol (ALFOL 20). For a good many years, alcohols of this type have been known as fatty alcohols because of their derivation from natural fatty acid sources... such as coconut oil and tallow. Conoco's research and development program over the past six years has pioneered their synthetic production from petroleum. For the first time, these alcohols are available from a stable raw material source (ethylene) and are very economical replacements for naturally-derived alcohols. ALFOL alcohols are commercially available as relatively pure (95-98%) individual alcohols and as mixtures of two or more components.

In the detergent industry and for industrial uses where products with good cleaning and/or wetting properties are required, the alcohols of about the C_{10} or C_{12} through C_{18} molecular weight range may be converted to several types of derivatives. Derivatives of straight-chain primary alcohols of the ALFOL type have several distinct advantages over those made from branch-chain primary alcohols or alkyl phenols.

Examples of typical fatty alcohol derivatives appear in the chart below.

ANIONIC DETERGENT DERIVATIVES

$CH_3\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}O\text{-}SO_3^- Na^+$
SODIUM LAURYL ALCOHOL SULFATE

$CH_3\text{-}CH_2\text{-}(CH_2\text{-}CH_2)_4\text{-}CH_2\text{-}CH_2\text{-}O\text{-}CH_2\text{-}CH_2\text{-}(O\text{-}CH_2\text{-}CH_2)_2\text{-}O\text{-}SO_3^- Na^+$
SODIUM LAURYL ETHER SULFATE

CATIONIC DERIVATIVE

$CH_3\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}N^+(CH_3)(CH_3)\ Cl^-$
LAURYL TRIMETHYL AMMONIUM CHLORIDE

NONIONIC DERIVATIVE

$CH_3\text{-}CH_2\text{-}(CH_2\text{-}CH_2)_4\text{-}CH_2\text{-}CH_2\text{-}O\text{-}CH_2\text{-}CH_2\text{-}(O\text{-}CH_2\text{-}CH_2)_6\text{-}O\text{-}CH_2\text{-}CH_2\text{-}OH$
ETHOXYLATED LAURYL ALCOHOL

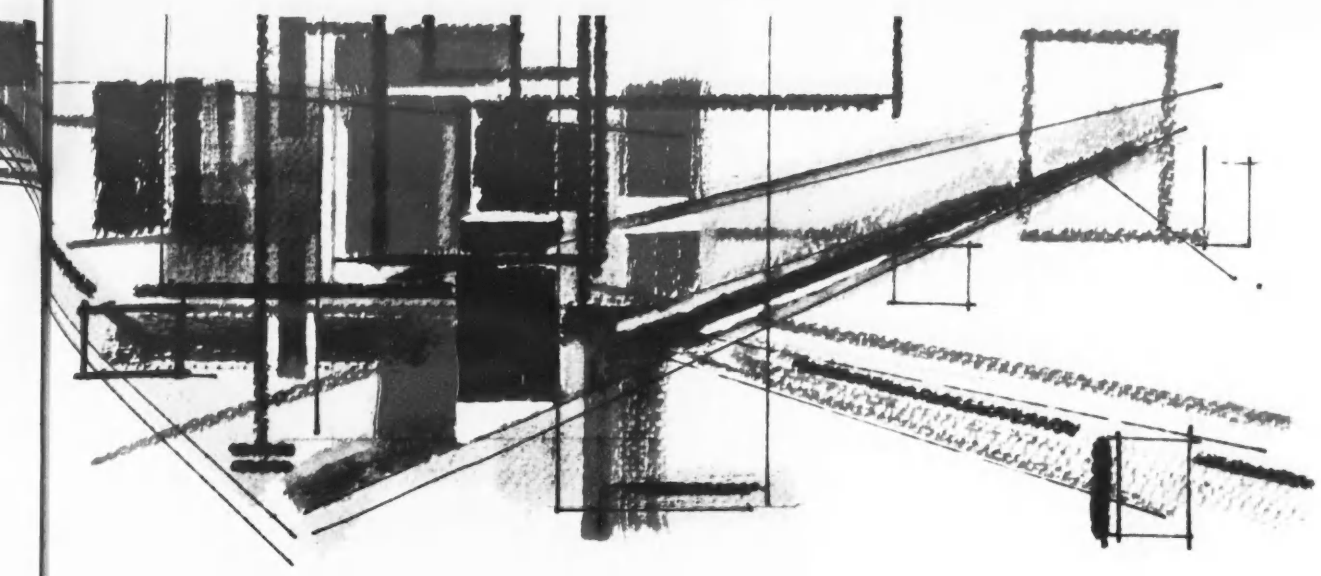
The first material shown on the left is sodium lauryl alcohol sulfate. The same compound results if ALFOL 12 is used instead of the coconut oil derived lauryl alcohol. It is an example of anionic type surface-active compounds made by sulfation of the alcohols, followed by neutralization to form a metallic, ammonium or amine salt. These alcohol sulfates have excellent surface-active properties which vary from the lower to higher molecular weight ends of the series. For example, the C_{12} derivative has good detersive and excellent foaming and wetting properties. Because its calcium and magnesium salts are quite soluble, this C_{12} derivative is unusually stable and effective in hard water. The C_{14} alcohol sulfate appears to be superior in detergent action to the C_{12} as judged by certain tests. Its foam stability and character are also excellent. The C_{16} and C_{18} alcohol sulfates are better detergents for cotton, but are not as good foam producers as the C_{12} and C_{14} alcohol sulfates.

Sodium lauryl ether sulfate is another example of an anionic type active ingredient for detergent formulations. This type material is made from an alcohol and ethylene oxide followed by sulfation and neutralization. The alcohol ether sulfate compounds are exceptionally water-soluble and are gaining interest as detergents with good foaming properties. Because of these and other advantageous characteristics, they are finding application in liquid detergent formulations.

Lauryl trimethyl ammonium chloride shown in the chart is an example of the cationic class. The cationics—also called quaternary ammonium compounds—will kill many types of bacteria. They are therefore used in many sanitizer formulations—even in oil wells to kill certain bacteria which cause plugging of the formation and corrosion of equipment.

Still another class of surface-active materials derived from ALFOL alcohols is illustrated by the ethyoxylated lauryl alcohol shown in the chart. This is representative of the nonionic type surface-active materials. The nonionics are particularly good emulsifiers for oil and water. The water-soluble (oxygen containing) end of the molecule can be sized relative to the oil-soluble end to yield a wide variety of products with different properties, as desired. These materials are used in household products and in many industrial applications...for example, wetting agents, textile processing chemicals, raw wool scouring, demulsifiers for crude oil and many others. Many are compatible with either anionics or cationics and can be used in formulations including one or the other of those types.

For further information concerning any Conoco detergent intermediate, please address your inquiry to Manager, Detergent Sales at the New York address listed on the front cover.



CONOCO PETROCHEMICALS FOR THE PLASTICS INDUSTRY

CONOCO H-35® secondary plasticizer is truly the "extender of profit" for vinyl formulators. Virtually colorless, its unique properties help achieve end products of highest quality. It is the most compatible of our secondaries for a wide range of formulations and gives improved viscosity control in plastisols.

TYPICAL PHYSICAL PROPERTIES

Color	Water White, Slightly Fluorescent
Specific Gravity at 100°F	0.8639
Molecular Weight	278
Viscosity S.U.S. at 100°F	85
Flash Point (C.O.C.)	315°F

CONOCO H-300® secondary plasticizer has long been recognized as a leader in the field of secondaries. Significant economies result from substantial replacement of primary plasticizers in most formulations.

TYPICAL PHYSICAL PROPERTIES

Color	Slightly Off Water White
Specific Gravity at 100°F	0.8639
Molecular Weight	300
Viscosity S.U.S. at 100°F	102
Flash Point (C.O.C.)	305°F

DEMIVIS® additive is a synthetic calcium sulfonate in a medium having plasticizing properties. It is an amber colored, homogeneous liquid having a specific gravity of approximately 0.937 at 60°F. DEMIVIS has important new applications in each of the following areas:

- As an extremely effective plastisol viscosity depressant
- As a pigment dispersant in plastisols
- As a time saver in premixing operations
- In vinyl foam production...used with blowing agents to produce finer, more uniform cell structure

---

CONOCO CYCLOHEXANE is commercially available in purities exceeding 99%. It is used as a starting material in the manufacture of nylon intermediates, such as caprolactum, cyclohexanone and adipic acid. Other applications include its use as a solvent and as a diluent in the manufacture of polyethylene by the low pressure process.

ALFOL 6, ALFOL 8 AND ALFOL 10 normal primary alcohols can be esterified individually or in mixtures to give plasticizers with many advantageous characteristics. Many millions of pounds of C_6 (hexyl), C_8 (octyl) and C_{10} (decyl) alcohols of both straight and branch-chain types are used to make plasticizers principally for polyvinyl chloride plastics. Variations in ester-type plasticizers can be obtained by changing either the alcohol or the acid portion of the ester. For example, the acid portion may be phthalic or maleic anhydride or dibasic acids such as adipic or sebacic. The branched-chain alcohols commonly used are 2-ethyl hexanol from the aldol process and mixed isomers of C_8 and C_{10} primary alcohols from the Oxo process.

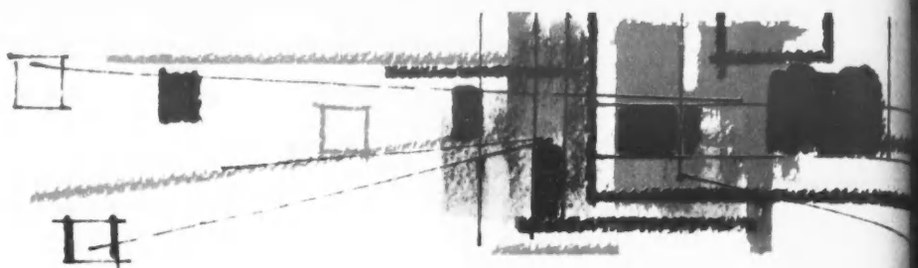
Phthalate esters of straight-chain primary alcohols have several well established advantages over competitive branch-chain materials. (1) They are less volatile. This means that they impart more permanent plasticity to PVC products. (2) They impart better low temperature flexibility. ALFOL alcohol derivatives perform better at both the high and end and the low end of the temperature scale. (3) They reduce plastisol viscosities. This makes plastisol formulations easier to handle both immediately after mixing and when aged.

Some of these improved properties were obtainable only from higher cost plasticizers, before the commercial development of the ALFOL alcohols. For example, polymer types give low volatility, and adipate and sebacate esters are superior to branch-chain DOP in low temperature flexibility.

Straight-chain alcohols are of interest also for other uses in the vinyl plastics industry. Esters of epoxidized fatty acids are gaining acceptance as non-metallic stabilizers. Maleate, acrylate and other unsaturated esters can be co-polymerized with vinyl acetate and other economical monomers to produce internally plasticized resins for paints and other products. The availability of straight-chain alcohols offer stabilizer and co-monomer producers the opportunity to achieve superior properties such as those which are well known in phthalate plasticizers.

Straight-chain dodecyl mercaptan an ALFOL alcohol derivative, is a valuable polymerization regulator used by rubber and plastic manufacturers. Controlling molecular weight in styrene-butadiene synthetic rubber is crucial. Too heavy a polymer cannot be worked easily in subsequent steps; material of too low molecular weight cannot absorb the proper amount of low cost extender oil.

For further information about any Conoco plastic intermediate, please address your inquiry to Manager, Plastic Intermediates Sales at the New York address listed on the front cover.



BRYTON

OIL-SOLUBLE SULFONATES FOR THE LUBRICATING OIL INDUSTRY

Bryton Chemical Company offers the world's most diversified series of oil-soluble sulfonates. Included in Bryton's full line are sodium, barium, calcium, ammonium and magnesium salts and sulfonic acids. The sulfonates are manufactured to give a wide choice of active concentrations and in base numbers *ranging up to 300!*

Years of research and development culminated recently in the commercial production of two 300 base number sulfonates...HYBASE® M-300 magnesium sulfonate and HYBASE C-300 calcium sulfonate. New salts are currently being investigated. These products represent a significant development for oil compounders who face the problem of introducing a high level of metal into their additive formulations to achieve outstanding "reserve alkalinity" action in finished oil blends. HYBASE M-300 is presently used in marine diesel cylinder lubricants for drastic reduction in wear when high-sulfur fuels are used. It is also an effective fuel additive in combating the harmful effects of vanadium contained in many economy fuels.

Sodium salts are generally offered at 62% concentration in mineral oil and are prepared at different molecular weight levels within the range of 430 to 500+. Choice for a given application is dependent on the required balance of hydrophylic versis hydrophobic characteristics. Usually, the lower the molecular weight the more hydrophilic, and the higher, the more hydrophobic. If the application is emulsification, lower or middle-range molecular weight products are best suited. For rust preventives and oil-system dispersancy, the higher molecular weights are preferable.

Calcium and barium sulfonates are primarily hydrophobic and are offered as either neutral or alkaline.

BRYTON® Ammonium Sulfonate 35-K is prepared as a 35% solution in kerosene, and is of interest to those seeking an ashless sulfonate.

BRYTON 76 is the only water-soluble sulfonate offered. It is 38% active diluted in isopropanol and water.

Sulfonic acids are available in two grades for those manufacturers who desire an intermediate.

A new line of synthetic fatty alcohols is now available to the lubricating oil industry. Trade-named ALFOL, this series of straight-chain primary alcohols with even numbers of carbon atoms from six through eighteen will relieve many products from dependence on fat and oil-derived materials. For example, in lubricating oils, poly-methacrylate ester type viscosity index improves and pour point depressants are well known. ALFOL alcohols can also be used in oxidation inhibitors of the zinc dithiophosphate type. Straight-chain alcohols provide esters with maximum compatibility for a given molecular weight as well as a high degree of stability.

BRYTON CHEMICAL COMPANY
1270 Avenue of the Americas, New York 20, N.Y.

Typical Analyses—BRYTON COMMERCIAL SULFONATES AND SULFONIC ACIDS

		MOLECULAR WEIGHT (1)	SULFONATE WT. % ACTIVE	WT. % OIL	WT. % WATER	WT. % INORGANIC SALT	ALKALINITY (2)
SODIUM SULFONATES	BRYTON 430 (3)	430	62	32.7	4.5	0.7	0.1
	BRYTON 445 (3)	445	62	32.7	4.5	0.7	0.1
	BRYTON F (3)	465	62	32.7	4.5	0.7	0.1
	BRYTON T (3)	500+	62	32.7	4.5	0.7	0.1
	BRYTON HY	470	62	33.8	3.5	0.7	0.04
	BRYTON BOSS 470	470	70	17.2	12.0	0.8	0.04
	BRYTON H-70	460	70	25.5	4.0	0.5	0.04
	*BRYTON 76	400	38	3.0	32.0	2.0	—
BARIUM SULFONATES	HYBASE Barium Sulfonate	1010	47	42	0.4	—	65 (Base No.)
	Barium Sulfonate 30-N	1010	30	68.4	0.2	—	8 (Base No.)
CALCIUM SULFONATES	Calcium Sulfonate 30-A	900	30	69.0	0.2	—	15 (Base No.)
	Calcium Sulfonate 45	900	45	53.3	0.2	—	21 (Base No.)
	HYBASE C-300	940	30	43.5	0.5	—	300 (Base No.)
MAGNESIUM SULFONATE	HYBASE M-300	920	30	47	0.5	—	300 (Base No.)
ASHLESS SULFONATE	Ammonium Sulfonate 35-K	455	35	64**	1.0	Nil	Trace
						% SULFURIC ACID	
SULFONIC ACIDS	Sulfonic Acid 45	440	45	46	3.0	6.0	—
	Sulfonic Acid 45-K	440	45	49**	3.0	3.0	—

(1) Pertains to the sulfonate portion of the products.
(2) Expressed as percent Na_2CO_3 for natural sulfonates and percent NaOH for synthetic sulfonates.
(3) Natural sulfonates. All other products are synthetic sulfonates. *In Isopropanol, 25% by weight. **Kerosene.

Coal Chemicals

yet on mid-month business, it's expected the hesitancy expressed by consumers earlier in September will be resolved satisfactorily.

Price remains unchanged for all grades of natural, and for synthetic.

Production through July this year at

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended September 23, were as follows:

Ammonia liquor	lbs.	631,986
Ammonium sulfate	lbs.	26,381,284
Benzene	gals.	2,897,612
Coaltar	gals.	14,619,226
Crude chemical oil	gals.	572,367
Solvent naphtha	gals.	95,395
Toluene	gals.	643,913
Xylene	gals.	178,865

447.8 million pounds trails output in the same period last year by a slim 4.8 million pounds.

Intermediates

Cyclohexanone—Demand is termed excellent by one producer.

Heavy volume of cyclohexanone sales are moving into aircraft engine lubricants as an additive. United States Air Force is one of the greatest consumers. Although employed only in piston engines, the expected growth in airlift capacity triggered by military expenditures is ruled as a growing end-use for cyclohexanone.

Solvent applications remain well sustained as the paint business maintains a solid sales pace.

Supplies are deemed adequate.

Price remains firm at 31c. a pound in tanks, works; 33½c. a pound for drums, carlots amounts works, and 34½c. a pound for lesser amounts.

Cyclohexanol—Spotty business characterized cyclohexanol during the first quarter. Ensuing months saw a pickup of sales which gradually lifted volume from the doldrums of the early period.

Plasticizer applications are still not in satisfactory sales volume but producers do feel cyclohexanol is on the ascent and that sales will begin to show strength toward the end of the year.

Supply is ample.

Price remains unchanged at the posting created April 1 which raised cyclohexanol to 28c. a pound, tankcar or truck, freight allowed East, 30½c. per pound in drums, carlot or truckload, and 31½c. per pound for lesser quantities.

Dodecylbenzene — Demand continues strong for dodecylbenzene reports one supplier.

Steady advances in soap and detergent production at an overall rate of 2 to 3 percent per annum is providing a satisfactory sales growth rate.

Overproduction is a factor in the market as it has been for several years past, but producers appear confident that a growing sales volume will keep the situation in hand.

Production of DDB through the first seven months this year registered 286.9 million pounds, as against 259 million pounds in the same period of 1960 for a production growth rate of 3.9 percent.

Price is reported firm at 11c. a pound in tanks, f.o.b., freight equalized; 13.4c. a pound in drums, carlots, and 14.4c. per pound for lesser amounts.

Phthalic Anhydride—Loose supply remains the predominant theme in this area of the market.

Producers had expected September to show a marked improvement over Summer volume. But, cautionary buying on the part of the consumers, due it's thought in part to the auto strikes, held September's sales below expectations.

Now producers are looking to October for an upward movement to occur.

While principal producers' prices still hold at the 17½c. per pound bulk price established in August, there are reports in the trade of weakness at the dealer level for specific large orders.

Phthalic production in July helped narrow the gap between this year's production and last. Output in the first seven months this year stood at 220.5 million pounds, only five million pounds shy of the total achieved in the same period last year.

Styrene Monomer—Under terms of the quarterly escalation clause, the price of styrene monomer in tankcars and tanktrucks for the fourth quarter effective October 1 became 11.03c. per pound.

No change in the carload or less carload price was made as the new escalation clause made effective earlier this year ruled out escalation changes for the less than tankcar amounts.

P. A.'s Good News

—Continued from page 5

tions are that the stability mentioned in our August report may now be weakening in the face of growing pressures.

Purchased Materials Inventories

The "bottoming out" of inventory liquidation noted last month seems to have occurred and a small degree of accumulation started. The "hair-line control" and "close to the belt" policy of purchasing executives mentioned in previous reports is still very much in evidence.

A solid 59 percent report no change, up from 56 percent last month, while 18 percent report lower levels. Higher figures are reported by 23 percent, up only 1 percent above August.

Employment

Employment moves to higher ground again this month, extending the upward trend line noted since February. The 34 percent reporting higher employment levels is the largest number so reporting since the pre-steel strike months of 1959. No change in employment was reported by 56 percent, down from the 63 percent so reporting in August. Only 10 percent report lower employment. This "lag" indicator is behaving as expected and is an encouraging sign for the continued upward trend in general business.

No dramatic change occurred in the buying policies of purchasing executives during September. Vendor lead times remained the controlling factor and, respondents tell us these are under constant review, as are price developments and world tensions.

Our charts show a "saw-tooth" effect within a narrow range on the month-to-month basis; but, when the year-to-date is viewed as a whole, a gradual lengthening is discernible. While some expect this lengthening to become more pronounced during the next few months, reluctance to abandon conservative policies developed during the past recession is quite apparent

	Percent Reporting				
September	*Hand to Mouth*	*30 Days*	*60 Days*	*90 Days*	*6 Mos. to 1 Yr.*
Production Materials	8	35	38	15	4
MRO Supplies	26	43	24	5	2
Capital Expenditures	12	7	14	21	46
August					
Production Materials	1	38	40	11	4
MRO Supplies	24	49	22	3	2
Capital Expenditures	13	8	17	20	47

Specific Commodity Changes

The reports of specific commodity changes this month reflect the over-all price picture previously described. Only one item was generally reported down, although the chemical market as a whole, continued weak.

There are no indications that any serious shortages have as yet developed.

On the up side are: Iron and steel castings, steel scrap, bearings, paper, burlap, and cotton.

On the down side: Aniline.

In short supply: None.

DU PONT

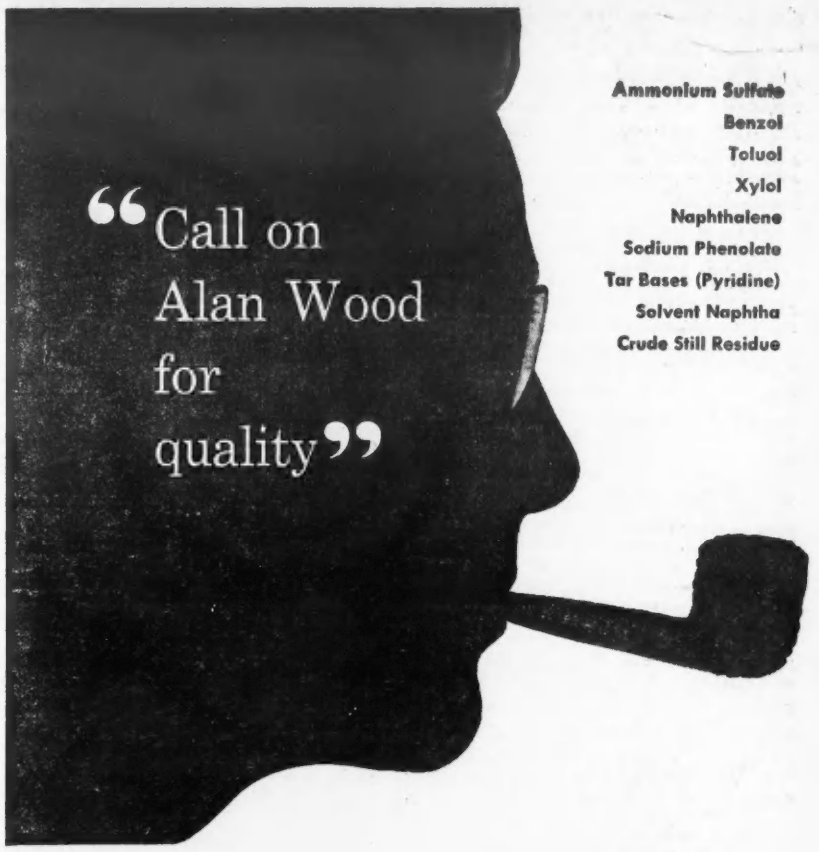
DIPHENYL-AMINE

(DPA)

Any quantities, including carloads. High-quality, lowest-cost aromatic secondary amine. Minimum freezing point, 52.5 C.

Many uses: antioxidant, anthelmintics, intermediate, stabilizers . . . in parasite control, lube oils, dyes, plastics, explosives, natural and synthetic rubbers.

For booklet, call our nearest district office (Boston, Chicago, Cleveland, Houston, Los Angeles, New York, or Charlotte) or write Du Pont, 2446 Nemours Bldg., Wilmington 98, Delaware.



Ammonium Sulfate
Benzol
Toluol
Xylol
Naphthalene
Sodium Phenolate
Tar Bases (Pyridine)
Solvent Naphtha
Crude Still Residue

Write or call Industrial Coke and Chemicals Sales Department

ALAN WOOD STEEL COMPANY

Conshohocken, Pa. • steelmasters for more than a century and a quarter

Makers of "A. W. Algrip" Abrasive Rolled Steel Floor Plate. • "A. W. Super Diamond" Rolled Steel Floor Plate • "A. W. Dynalloy," Low Alloy, High Strength Steel • A. W. Iron Powder • Cold Rolled Sheet and Strip • Hot Rolled Sheet and Strip • Sheared Plates • Foundry and Industrial Coke • Coal Chemicals • Mine Products • "Penco" Lockers, Shelving and Cabinets.

PUZZLE

??????????????????

In the arrangement of coins above, move only one coin so there are four coins in each row.

??????????????????

There's no puzzle about product performance when you buy chemicals from United States Steel. To solve puzzler above:

Place coin No. 1 or 4 on top of coin No. 3.

Benzene • Toluene
Xylene • Phenol • Cresol
Cresylic Acid
Naphthalene • Creosote
Picoline • Pyridine
Pitch • Ammonium Sulfate
Ammonium Nitrate
Anhydrous Ammonia
Nitric Acid

U. S. Steel Chemical Sales Offices: Pittsburgh, New York, Chicago, Salt Lake City and Fairfield, Alabama

USS Chemicals

IMPORTS at United States Ports

New York

AGAR—50 bgs, Meer Corp, Casablanca
116 cs, T M Duche & Sons, Leixoes
10 cks, Morningstar Paisley Inc, Barcelona
ALUMINA, ACTIVATED—2 dms, Fischer Scientific Co, Hamburg
ALUMINUM HYDROXIDE—22 dms, Hudson Shipping Co, Liverpool
ALUMINUM OXIDE—5 cks, King Shipping Co, Havre
ALUMINUM SULFATE—330 bgs, Interstate Universal Inc., Liverpool
AMINO ACIDS—13 dms, Ajinomoto Co, Yokohama
AMINOPYRINE—20 dms, Panmed Pharmaceuticals Inc, Trieste
ANILINE DYES—10 dms, L & R Organic Products, Rotterdam
6 dms, General Aniline & Film Corp, Hamburg
10 dms, Heemsoth Kerner, Liverpool
13 dms, Putnam Chemical Corp, Hamburg
25 dms, Wedeman & Godknecht, Hamburg
221 dms, Sandoz Inc, Havre
20 dms, Dye Specialties Inc, Liverpool
ANTIMONY REGULUS—710 cs, Rijeka
ARABIC GUM—254 bgs, T M Duche & Sons, Port Sudan
700 bgs, Port Sudan
ASBESTOS FIBER—2,680 bgs, Johns Manville Corp, Durban
ASCORBIC ACID—24 dms, Byron Chemical Co, Kobe
BARBASCO ROOT—273 bgs, Callao
BARIUM SULFATE—300 dms, Picker X-Ray Corp, London
BEESWAX—64 bgs, Koster Keunen, Casablanca
100 bgs, S Zeitlin Sons, Paranaqua
162 bgs, Porto Alegre
BENZOIC ACID—2 dms, Allied Chemical Co, Genoa
BILE ACIDS—21 dms, Merck & Co, Buenos Aires
BONE—61 bgs, International Packers Ltd, Montevideo
1,207 bgs, Buenos Aires
BONE BLACK—341 bgs, Martin Baer & Co, Casablanca
BONE CHARCOAL—160 bgs, Martin Baer & Co, Lisbon
BRASS POWDER—10 dms, Heemsoth Kerner, Liverpool
BRONZE POWDER—93 dms, Hamburg
n-BUTYL DIETHYL MALONATE—16 dms, Geigy Chemical Corp, Liverpool
CAFFEINE ANHYDROUS—198 dms, Rohdio Inc, Havre
CALCIUM CARBONATE—1,500 bgs, Pluess Stauffer, Antwerp
700 bgs, Hammill & Gillespie, Manchester
CALCIUM PERBORATE—10 bgs, Sinclair & Valentine, Gothenburg
CAMPHOR POWDER—100 cs, Prentiss Drug & Chemical Co, Kobe
20 cs, Polychemical Lab, Kobe
CAMPHOR, SYNTHETIC—300 dms, Bremen
CAMPHORIC ACID—5 kgs, Treemond Co, Manchester
CANANGA OIL—3 dms, London
CARAWAY SEED—200 bgs, Ideal Trading Co, Rotterdam
150 bgs, M J Golombeck, Rotterdam
400 bgs, Levy & Levis Co, Rotterdam
200 bgs, Louis Furth, Gdynia
CARNAUBA WAX—167 bgs, Cornelius Wax Refining Corp, Fortaleza
378 bgs, M Argueso & Co, Fortaleza
88 bgs, Curacao Trading Co, Fortaleza
112 bgs, Irving Trust Co, Fortaleza
112 bgs, Strahl & Pitsch, Fortaleza
608 bgs, Frank B Ross, Parnahiba
188 bgs, M Argueso & Co, Parnahiba
125 bgs, J W Hanson Co, Parnahiba
186 bgs, Cornelius Wax Refining Corp, Parnahiba
146 bgs, J W Hanson Co, Natal
134 bgs, M Argueso & Co, Natal
CASEIN—2,000 bgs, Borden Chemical Co, Buenos Aires
272 bgs, F H Paul & Stein Bros, Oslo
500 bgs, F C Gerlach, Buenos Aires
200 bgs, J R Spellacy, Melbourne
300 bgs, F H Paul & Stein Bros, Buenos Aires
1,000 bgs, Crawford Kish & Co, Gdynia
100 bgs, F H Paul & Stein Bros, Dublin
1,500 bgs, Buenos Aires
430 bgs, Ponta Delgada
CASSIA—200 bgs, A G Dunn, Saigon
CASTOR OIL—308 tons, Baker Castor Oil Co, Santos
300 tons, Baker Castor Oil Co, Recife
300 tons, Wallace & Tiernan, Fortaleza
300 tons, Brazil Oiticica Inc, Fortaleza
313 tons, Baker Castor Oil Co, Salvador
300 tons, Salvador
250 tons, Recife
CELERY SEED—50 bgs, Kellys America Ltd, Marseille
CHICAGO ACID—20 dms, Kaufman & Vinson, Kobe
CHLORAL HYDRATE—20 cks, Marseille
CINNAMON BARK—57 bgs, Rotterdam
CITRONELLA OIL—25 dms, George Uhe Co, Keelung
25 dms, Lo Curto & Funk, Puerto Barrios
25 dms, Keelung
25 dms, Kaohsiung
CLOVE—280 bgs, Zanzibar
CLOVE OIL—24 dms, Zanzibar
COCONUT OIL—300 tons, Zamboanaga
CODLIVER OIL—90 dms, Peder Devold Oil Co, Bergen
100 dms, Interocean Chemical & Minerals Corp, Bergen
COPAIBA BALSAM—8 dms, Peter Andrea Corp, Belem
COPAL GUM—70 bgs, S Winterbourne & Co, Singapore
60 bgs, Wm H Scheel, Manila
68 bgs, O G Innes Corp, Manila
COPPER OXYCHLORIDE—10 bgs, Gallard Schlesinger, Marseille
CORIANDER SEED—500 bgs, J Weinstein, Casablanca
100 bgs, Wm E Martin & Sons, Casablanca
CORN OIL——199 tons, Corn Products Co, Rotterdam
1,000 bgs, Casablanca
CORN STARCH——2,000 bgs, Impex Agricultural Co, Rijeka
600 bgs, Capetown
CREAM OF TARTAR—74 bgs, Marseille
CRESYLIC ACID—25 tons, Van Oppen & Co, Liverpool
DEGRAS—27 dms, Traders Service Corp, Liverpool
35 dms, Olympic Shipping Co, Liverpool
DEXTRIN—200 bgs, Nicholson & Co, Rotterdam
DIBUTYL TIN OXIDE—30 dms, International Engineers Inc, Kobe
14 dms, Nissho American Co, Kobe
DYES, COALTAR—20 dms, Orlex Dyes & Chemical Corp, Hamburg
41 dms, Wedeman & Godknecht, Hamburg
EARTH COLORS—500 bgs, Smith Chemical & Color Co, Leghorn
ELDER FLOWERS—14 bls, Meer Corp, Rijeka
FENUGREEK OIL—1 cs, Lo Curto & Funk, Rotterdam
FERRIC SULFATE—50 dms, Hudson Shipping Co, Liverpool
FORMIC ACID—50 dms, Rotterdam
FUEL OIL—307,978 bbls, Shell Caribbean Petroleum Co, Punta Cardon
98,723 bbls, New England Petroleum Corp, Punta Cardon
113,039 bbls, Royal Petroleum Corp, San Lorenzo
175,000 bbls, Belcher Oil Co, Aruba
189,391 bbls, Humble Oil Co, Puerto La Cruz
174,545 bbls, Humble Oil Co, Aruba
193,842 bbls, Humble Oil Co, Las Piedras
118,302 bbls, Metropolitan Petroleum Corp, Puerto Ordaz
GALL—1 dm, Wilson Lab, Callao
GELATIN—200 bgs, T M Duche & Sons, Antwerp
GINGER—86 bgs, Ludwig Mueller, Liverpool
GLUE—500 bgs, Jung Forwarding Co, Liverpool
GLYOXAL—50 dms, Union Carbide Corp, Rotterdam
133 djns, Dr F Jonas, Havre
GRAPHITE—300 bgs, Joseph Dixon Crucible Co, Bremen
GUANIDINE NITRATE—20 dms, Terra Chemicals Inc, Hamburg
GUAR GUM—100 bgs, Colony Import & Export Corp, Genoa
GYPSUM—600 bgs, C B Chrystal Co, Liverpool
1,200 bgs, Whittaker Clark & Daniels, Liverpool
GYPSUM, CRUDE—31,187 tons, U S Gypsum Co, Hantsport
HEPTANOIC ACID—250 dms, International Selling Corp, Marseille
IPECAC ROOT—22 bgs, J M Rodriguez & Co, Cristobal
14 bgs, Meer Corp, Cristobal
IRON BLUE—29 dms, Van Oppen & Co, Liverpool
IRON OXIDE—22 bgs, Arnold Engineering Co, Hamburg
100 bgs, Hudson Shipping Co, Oslo
JAPAN WAX—50 cs, Strohmeyer & Arpe, Kobe
KOLA NUTS—200 bgs, D Steengrafe & Co, Kingston
LACTIC ACID—48 cks, Havre
LACTOSE—4 dms, Hamburg
LEAD, WHITE—200 bags, Liverpool
400 bgs, Rotterdam
LEMONGRASS OIL—30 dms, Leonhardt & Brush, Puerto Barrios
55 dms, Lo Curto & Funk, Puerto Barrios
LICORICE ROOT—237 bls, Wm E Martin & Sons, Piracus
LIME OIL—2 dms, S S Schoemann, Port Au Prince
LITHARGE—100 bgs, Rotterdam
LIVER CONCENTRATE—5 cs, R J Saunders, Rotterdam
LIVERMEAL—400 bgs, Montevideo
LIVER POWDER, DESICCATED—34 dms, Van Gelder Fanto Corp, Buenos Aires
LOCUST BEAN GUM—400 bgs, Meer Corp, Genoa
MACE—42 cs, Singapore
MAGNESITE—1,090 bgs, Cochin
MELAMINE—440 bgs, Yokohama
MENTHOL—10 cs, George Uhe Co, Keelung
75 cs, P A Dunkel, Santos
30 cs, Kane Import Corp, Santos
150 cs, Lo Curto & Funk, Santos
75 cs, American Far Eastern Syndicate, Santos
158 cs, Schawabach & Co, Santos
98 cs, Magnus, Mabee & Reynard, Keelung
MOLASSES—477 tons, Pacific Molasses Co, Salaverry
MONOSODIUM GLUTAMATE—250 dms, Ajinomoto Co, Yokohama
MONTAN WAX—80 bgs, Hamburg
MUSK, ARTIFICIAL—10 dms, Roure-Dupont Inc, Rotterdam
MUSTARD SEED—500 bgs, A A Sayia, Aarhus
580 bgs, Old Dutch Mustard Co, Copenhagen
2,355 bgs, F Henjes Jr, Copenhagen
300 bgs, Frank Tea & Spice Co, Gdynia
400 bgs, Baker Brands, Aarhus
448 bgs, P J Anderson, London
224 bgs, Kellys America Ltd, London
MYRABOLAM EXTRACT—500 bgs, International Products Corp, Liverpool
NAPHTHALENE—934 bgs, J N Forker, Liverpool
835 bgs, Witco Chemical Co, Liverpool
1,556 bgs, Gallard Schlesinger, Antwerp
NEOPENTANE—7 cs, Enjay Chemical Co, Hamburg
NUTMEG—50 bgs, K H Landes & Co, Port of Spain
140 bgs, K H Landes & Co, Singapore
283 bgs, Singapore
OAKMOSS—153 bls, Givaudan Corp, Rijeka
OAKMOSS EXTRACT—1 dm, Noville Essential Oil Co, Rijeka
OENANTHOL—14 dms, International Selling Corp, Marseille
OLIVE OIL—123 dms, Schroeder Bros, Seville
100 dms, Uddo & Taormina, Seville
68 dms, Uddo & Taormina, Barcelona
25 dms, Marseille
OREGANO LEAVES—400 bgs, Louis Furth, Piracus
160 bgs, K H Landes & Co, Piracus
OURICURY WAX—111 bgs, Wm H Muller, Rotterdam
PALMITIC ACID—2 cs, Wm Zinsser & Co, Calcutta
PALMKERNEL OIL—2,143 cs, B M T Commodity Corp, Rotterdam
PAPAIN—224 cs, Mombasa
PAPRIKA—100 bgs, National City Bank, Hamburg
PENNYROYAL OIL—2 dms, Chase Manhattan Bank, Lisbon
PENTAERYTHRITOL—114 bgs, D Hauser, Kobe
PEPPER BLACK—600 bgs, Mitsui & Co, Belem
950 bgs, Mincing Trading Corp, Belem
300 bgs, A G Dunn, Belem
150 bgs, Internatio Rotterdam, Belem
400 bgs, C M Van Silevoldt, Belem
200 bgs, Reliable Mercantile Corp, Belem
200 bgs, M J Golombeck, Belem
420 bgs, A G Dunn, Singapore
160 bgs, Max Van Pels, Singapore
100 bgs, California Commodities Corp, Singapore
58 bgs, Producters Co, Singapore
954 bgs, Singapore
PETROLEUM CRUDE—132,404 bbls, Hum Inc, Punta Cardon
142,367 bbls, California Oil Co, Punta de Palmas
PIMENTO—80 bgs, Otto Gerdau, Kingston
140 bgs, M J Golombeck, Kingston
POLLACKLIVER OIL—20 dms, Peder Devold Oil Co, Yokohama
50 dms, Mitsubishi Corp, Yokohama
POPPYSEED—150 bgs, P H Petry, Rotterdam
200 bgs, Bakers Brands, Rotterdam
50 bgs, D Rosen, Rotterdam
250 bgs, R J Spitz, Gdynia
POTASH, CAUSTIC—198 dms, B T Chemico Inc, Gothenburg
10 cs, B T Chemico Inc, Gothenburg
POTASSIUM FERRICYANIDE—210 bbls, Atlantic Raw Materials, Hamburg
PYRITES—335 cks, American Metal Climax, Leixoes
QUEBRACHO EXTRACT—872 bgs, International Products Corp, Buenos Aires
1,327 bgs, Barkey Importing Co, Buenos Aires
572 bgs, Tan American Corp, Buenos Aires
6,046 bgs, American Tanners Ltd, Buenos Aires
QUILLAY BARK—63 bls, S B Penick & Co, Valparaiso
31 bls, S B Penick & Co, San Antonio
QUINIDINE GLUCONATE—4 dms, Lo Curto & Funk, Bremen
RAPE SEED—550 bgs, Hartz Mountain Products, Rotterdam
RAUWOLFIA SERPENTINA ROOT—100 bgs, Calcutta
ROCHELLE SALTS—316 bgs, Marseille
ROSEMARY LEAVES—113 bls, Lisbon
SAGE LEAVES—78 bls, M J Golombeck, Piraeus
575 bls, V A Cordovi, Rijeka
SANDALWOOD OIL—14 cs, Cochin
SAPONIN—10 dms, Karr Ellis, Liverpool
SEEDLAC—250 bgs, Capitol Shellac Corp, Bangkok
450 bgs, Calcutta
SESAME SEED—551 bgs, Hoger Corp, Santos
300 bgs, Louis Furth, Santos
SESAME SEED, HULLED—600 bgs, Nieman Bros, Corinto
500 bgs, Louis Furth, Corinto
SHELLAC—870 bgs, Wm Zinsser & Co, Calcutta
85 bgs, National City Bank, Calcutta
166 bgs, F H Paul & Stein Bros, Bremen
300 bgs, Calcutta
SHELLAC WAX—28 bgs, Wm Zinsser & Co, Calcutta
SODA, CAUSTIC—666 dms, B T Chemco Inc, Gothenburg
SODIUM ALGINATE—10 dms, E Mendell, Havre
SODIUM CYANIDE—600 dms, Chemical Manufacturing Co, Liverpool
SODIUM PERBORATE TETRAHYDRATE—300 bgs, Chemical Manufacturing Co, Liverpool
SODIUM PHOSPHATE—30 cs, M J Corbett, Rotterdam
SODIUM SULFATE, ANHYDROUS—400 bgs, Lo Curto & Funk, Antwerp
SODIUM THIOSULFATE—400 bgs, Chemical Manufacting Co, Liverpool
SPERM OIL—541 dms, Arista Oil Products Corp, Oslo
SPERMACETI—166 cs, Strohmeyer & Arpe, Kobe
STEATITE—180 bgs, Hammill & Gillespie, Madras
100 bgs, M Kirchberger & Co, Madras
STYRAX—50 cs, Istanbul
TAMARIND PULP—100 bgs, Murbas Trading Co, Madras
TAPIOCA—550 bgs, Morningstar Paisley Inc, Itajai
TAPIOCA FLOUR—2,222 bgs, Morningstar Paisley Inc, Itajai
1,353 bgs, American Metagraph Co, Itajai
833 bgs, Manhattan Adhesives Corp, Itajai
4,480 bgs, Morningstar Paisley Inc, Kohsichang
TARRAGON—29 bls, Norwalk Mills, Rijeka
TARTARIC ACID—100 bgs, Frank Samuel & Co, Marseille
THYME LEAVES—75 bls, Louis Furth, Marseille
40 bgs, Hismoco American Co, Marseille
200 bgs, Seek & Kade, Marseille
TONKA BEANS—37 cks, Machado & Co, Port of Spain
14 cs, Bemo Shipping Co, Rio de Janeiro
TRICHLOROACETIC ACID—30 dms, Cosmos Shipping Co, Bremen
TRICHLOROETHYL PHOSPHATE—2 dms, Aceto Chemical Co, Liverpool
TURMERIC—134 bgs, Hismoco American Co, Kaohsiung
ULTRAMARINE BLUE—60 bgs, Whittaker Clark & Daniels, Liverpool
UREA—440 bgs, Stone & Downer Co, Kobe
VANILLA BEANS—10 cs, F Huber & Co, Cristobal
20 cs, L A Champon & Co, Cristobal
10 cs, J Manheimer, Cristobal
10 cs, Morningstar Paisley Inc, Cristobal
VEGETABLE OIL—50 cs, Polarome International, Rotterdam
VIOMYCIN SULFATE—11 cs, Ciba Pharmaceutical Products, Southampton
WATTLE EXTRACT—441 bgs, International Products Corp, Beira
535 bgs, Barkey Importing Co, Dares Salaam
WAX—700 bgs, Hostawa Co, Bremen
WAX, SYNTHETIC—2,000 bgs, Moore & Munger, Durban
WOOD ALCOHOLS—38 cs, Traders Service Corp, Liverpool
ZINC OXIDE—1,180 bgs, Bremen

Los Angeles

CALCIUM CARBONATE—1,000 bgs, Synkoloid Co, Antwerp
CARAWAY SEED—100 bgs, Hismoco American Co, Rotterdam
CARNAUBA WAX—56 bgs, Balfour Guthrie, Hamburg
EARTH COLORS—800 bgs, Naftone Inc, Hamburg
GYPSUM, CRUDE—17,779 tons, Kaiser Gypsum Co, San Marcos
MAGNESIUM CARBONATE—20 cs, Antwerp
MOLASSES — 4,000 tons, Pacific Molasses Co, Corinto
POPPYSEED—100 bgs, Hismoco American Co, Rotterdam
SULFAMIC ACID—375 bgs, J G Wiley, Yokohama
UREA—2,500 bgs, Antwerp
ZIRCON SAND—400 bgs, Newcastle

Philadelphia

BONE—2,330 bgs, Ossa Products, Buenos Aires
CALCIUM CARBONATE—6,000 bgs, Antwerp
CASEIN—160 bgs, F H Paul & Stein Bros, Bordeaux
CASTOR OIL—200 tons, Salvador
100 tons, Santos
CETYL OLEYL ALCOHOL—50 dms, A & S Corp, Oslo
DYES, COALTAR—20 dms, Orlex Dyes & Chemical Corp, Hamburg
FUEL OIL—120,699 bbls, Texaco Co, Trinidad
110,129 bbls, Atlantic Refining Co, Aruba
LICORICE ROOT—6,311 bls, McAndrews & Forbes, Kyllini
6,575 bls, McAndrews & Forbes, Leiningrad
NAPTHA—112,009 bbls, Texaco Co, Ponta Pierre
NAPHTHALENE—391 bgs, Gallard Schlesinger, Rijeka
2,500 bgs, Gdynia
PETROLEUM, CRUDE—280,566 bbls, Mobil Oil Co, Ras Tanura
145,620 bbls, Mobil Oil Co, Covenas
186,716 bbls, Texaco Co, Covenas
188,659 bbls, Texaco Co, Punta de Palmas
307,579 bbls, Gulf Oil Corp, Kharg Island
133,720 bbls, Gulf Oil Corp, Bachaquero
234,559 bbls, Atlantic Refining Corp, Puerto La Cruz
QUEBRACHO EXTRACT—1,164 bgs, Tan American Corp, Buenos Aires
721 bgs, Barkey Importing Co, Buenos Aires
RUTILE SAND—3,000 bgs, Chas Kurz & Co, New Castle
11,963 bgs, New Castle
SODIUM ANTIMONATE—500 bgs, Pigment Chemical Co, Hamburg
SODIUM NITRATE—4,000 tons, Morgan Guaranty Trust Co, Tocopilla
SODIUM PERBORATE—100 bgs, Leghorn
SULFUR, CRUDE—6,800 tons, Pan American Sulfur Co, Coatzacoalcos
TALLOW—25 dms, Harrison ByProducts, Melbourne
VANILLA BEANS—120 cs, Marseille
ZIRCON SAND—7,375 bgs, Frank Samuel & Co, New Castle
1,963 bgs, Frank Samuel & Co, Brisbane
4,015 bgs, Brisbane

San Francisco

ANTIMONY REGULUS—300 cs, Indussa Corp, Antwerp
BONE ASH—100 bgs, Liverpool
BONEMEAL—275 tons, Stauffer Chemical Co, Buenos Aires
CALCIUM CARBONATE—2,400 bgs, Pluess Stauffer, Antwerp
CARBON TETRACHLORIDE—50 dms, Leghorn
CASEIN—100 bgs, F H Paul & Stein Bros, Havre
CELERY SEED—84 bgs, H M Newhall & Co, Bombay
87 bgs, California Commodities Corp, Bombay
COPRA—1,000 tons, Cargill Inc, Cebu
CUMIN SEED—300 bgs, W L Willner Co, Hong Kong
DILL SEED—80 bgs, H M Newhall & Co, Bombay
GRAPHITE—800 bgs, Pacific Graphite Co, Hong Kong
GUAR PROTEIN—3,007 bgs, General Mills Inc, Bombay
ISOCYANATE—3 dms, Harper Robinson & Co, Liverpool
MOLASSES—3,200 tons, Kaohsiung
MONOSODIUM GLUTAMATE—100 dms, Ajinomoto Co, Yokohama
PEPPER, BLACK—100 bgs, California Commodities Corp, Belem
80 bgs, Hong Kong
QUEBRACHO EXTRACT—1,585 bgs, International Products Corp, Buenos Aires
SESAME SEED—400 bgs, B C Ireland, Corinto
350 bgs, A J Fritz, Corinto
75 bgs, H M Newhall & Co, Corinto
SODIUM BICARBONATE—200 bgs, Chemical Manufacturing Co, Liverpool
TAMARIND POWDER—242 bgs, American Key Products, Bombay
ZINC CHLORIDE—15 dms, Antwerp

Sodium Nitrite, Nitrate Cleared for Use in Fish

Sodium nitrite and sodium nitrate have been cleared as safe for use under the food additives law by Food & Drug Administration as preservatives and color stabilizers for certain fish products.

Sodium nitrite was cleared for use in canned pet food containing meat and fish at a maximum tolerance level of 20 parts per million. Sodium nitrate was held to be safe for use in smoked cured salmon, along with sodium nitrite, in amounts not exceeding 500 parts per million.

FDA also announced approval of petitions filed by the National Association of Chewing Gum Manufacturers and Goodrich-Gulf Chemicals, Inc., Cleveland, Ohio, for use of various natural gums and other ingredients in the manufacture of chewing gum base. Details of the order were announced in the *Federal Register* of September 23.

Oxo's Alcohols Plant Progressing on Schedule

Construction of the Oxo Chemicals Company industrial alcohols plant at Haverhill, Ohio, is about 12% complete, C. L. Parris, plant manager, reports.

Although the weather has been unfavorable for plant construction during much of the spring and summer, a "critical paths" study just completed by the contractor still indicates early 1962 as the plant completion date. Oxo Chemicals is a jointly-owned subsidiary of Amoco Chemicals Corporation and Pittsburgh Chemical Company.

Bids Wanted

Chemical and surgical equipment for Viet-Nam. Tender No. 0266 Jan 31. Central Purchasing Authority, Viet-Nam, Saigon, Viet-Nam. Bidding instructions, specifications and other pertinent data are available for review on loan from the Business Services Division, Bureau of International Business Operations, U.S. Department of Commerce, Washington 25, D.C.

Linseed Oil, 9,654 gals., 1,529 pail, various Fed. Specs., various destinations. Military Industrial Supply Agency, 700 Robbins Ave., Philadelphia 11, Pa.

Penicillin, Streptomicin, Dextran for Ceylon. Dec. 12 Magnesium trisilicate etc. Dec. 5. Sodium lactate, dextrose injections etc. Jan. 2. Chairman, Tender Board, Ministry of Health, Colombo, Ceylon. Bidding instructions, specifications and other pertinent data are available from the source. Copies are also available for review on loan from the Business Services Division, Bureau of International Business Operations, US Department of Commerce, Washington 25, D.C.

Pharmaceutical Products and Drugs for Tunisia. The Bureau of International Business Operations, US Department of Commerce. The tender covers some 300 items and bids should reach the Pharmacie Centrale De Tunisie, Avenue Charles Nicolle, El Menzah, Tunis, not later than Oct. 7. Bidding instructions, specifications and other pertinent data are available from the source. They are also available for review on loan from the Business Services Division, Bureau of International Business Operations, US Department of Commerce, Washington 25, D.C.

Drugs, Fine Chemicals

Isoniazid, which cured and killed its market in the mid-1950's, could get a new lease on life. Last week, Public Health Service announced that the drug, which has been used to treat tuberculosis, has also been found effective in preventing it. Large-scale trials begun four years ago in sixteen states, Puerto Rico and Mexico, PHS officials said, showed that izoniazid was 80 percent effective in preventing tuberculosis among more than 12,000 persons in the homes of tuberculars.

Physicians currently prescribe isoniazid for ambulatory TB patients and in some instances, undoubtedly, for members of a tubercular's family. How widespread is the latter practice is not certain, but the PHS announcement, as a public endorsement, should increase it substantially.

The US market for the drug is now small and confined to a few big buyers, such as the Veterans' Administration, state welfare departments and the few remaining TB sanatariums. This plus the fact that isoniazid is not a very profitable item caused all of the original US producers to quit the business in the years since 1952.

Recently, one manufacturer of the requisite coaltar intermediates entered the isoniazid market but within a few weeks it bowed out. Now, even with the expectation of greater demand, the return of former producers or the entrance of new ones is still not likely. Reason: Low-priced imports.

Interest in isoniazid has continued in other parts of the world—particularly where inadequate diet accounts for a high incidence of TB. Currently, production facilities are going up in Iron Curtain countries and in India.

Drugstore sales of izoniazid pills could be in the future here, of course, should physicians prescribe the drug on a regular basis for persons with a family history of TB. The extent of this market can be seen in statistics that show some 30 percent of the US population harbor the TB bacillus, although they do not manifest the active disease.

A lot will depend on a still unanswered question: Will protection against TB continue after the patient has ceased to take the drug.

PHS concludes from its field trials that the use of isoniazid by persons in homes of those having tuberculosis could be expected to reduce substantially the annual rate of 55,000 new cases and 10,000 deaths.

Ascorbic Acid—There was no price news last week, for which producers are undoubtedly thankful. Three times within a month, reductions were made and these changes were merely the continuation of a downtrend that began earlier.

Caffeine — July imports of caffeine totaled 175,433 pounds, and were valued at $356,434 and dutied at $89,468. Shipping here were: West Germany, 109,683 pounds, valued at $195,831 and dutied at $55,936; United Kingdom, 41,250 pounds, valued at $102,338 and dutied at $21,037; and The Netherlands, 24,500 pounds, valued at $58,265 and dutied at $12,495.

Domestic prices, boosted July 1, are unchanged, but this reportedly indicates no ease in competition which is still rough. Upturn in pharmaceutical demands will be felt in coming weeks and coupled with the large cola market throughout the year, this should act as a stabilizing factor, for there are only a few domestic suppliers to compete for the business.

Iodine—The US sales agent for Chilean crude iodine states that no price reduction has been made, despite rumors to the contrary, which probably got started with the increase in imports of Jap material.

It's understood—as explained here previously—that the rise in inshipments of Jap iodine is due to heavy purchases by the government for the national stockpile of strategic materials.

Lysine—While lysine demand is fairly good, the market has not expanded to the extent forceast several years ago when there was much interest in this amino acid.

Indicative of what's to come was the recent exit from the market of one of the original developers of the chemical. The firm's action followed Food & Drug Administration's refusal to classify lysine as an optional ingredient in white bread.

FDA's move was something of a catastrophe for it closed to lysine manufacturers what was potentially their largest single market.

There is already interest this side of the Atlantic in a Dutch firm's new caprolactam route to lysine. This reportedly saves on manufacturing costs and unless the process is licensed to a manufacturer here, imports could eventually pose a problem.

Magnesium Trisilicate—Prices for USP magnesium trisilicate micronized powder will be advanced 15c. a pound on spot on October 1 and a month later on contract. New schedule lists a single 100-pound drum at 85c. a pound, 500-pound lots at 80c. a pound.

Quinidine—Quinidine imports in July totaled 132,328 ounces and were valued at $104,584. West Germany shipped 75,000 pounds, valued at $64,045, and the Netherlands supplied the remainder.

Imports of cinchona derivatives, including quinine sulfate, were 46,629 ounces the same month. With a combined value of $20,735, shipments arrived here from the Netherlands (29,989 ounces) and the United Kingdom (16,640).

Strychnine — Imports of strychnine, which is available only through importers, totaled 11,500 ounces in July. The entire shipment was valued at $10,607 and dutied at $1,150.

The major supplier was India, accounting for 8,000 ounces, valued at $6,757 and dutied at $800. The United Kingdom shipped the remainder.

Vitamin A—The new schedule on vitamin A—initiated September 7 and later adopted industrywide—lists base prices of 7c. and 9½c. per million units, respectively, for liquid and dry forms.

Improved manufacturing techniques and resulting savings in production costs were responsible for the original price cut. The trade followed for obvious competitive reasons.

Vitamin B_{12}—Prices are firm and, according to trade sources, stability can be looked for. It took several drastic measures, however, to halt a persistently downward price trend. Among them, successive and very large reductions, perhaps, figure most prominently

In other actions, however, the leading

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Sept. 30, 1960
58.88	58.88	59.27	59.93

For Current Prices See Page 10

Drugs and Fine Chemicals Output: July

Following statistics for selected fine chemicals and drugs were compiled by the Tariff Commission. Figures relate to the production of bulk material only.

		July	June
Acetylsalicyclic acid	lbs.	1,148,417	1,968,680
Ascorbic acid and salts	lbs.	—	628,473
Dihydrostreptomycin	gms.	—	18,615,802
Niacinand amide	lbs.	119,778	236,725
Penicillin salts	million-units	42,339,329	77,420,527
Phenobarbital	lbs.	—	—
Pyridoxine	lbs.	—	—
Streptomycin	gms.	15,436,516	27,273,488
Sulfa drugs	lbs.	—	353,917
Tetracycline	gms.	—	14,169,900
Thiamine derivatives	lbs.	—	—

A dash (—) indicates data not reported.

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PLANT: 9412 Railroad Avenue, North Bergen, N.J.
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2143 St. Patrick Street, Montreal 22, Quebec
41 Advance Road, Toronto 18, Ontario

PAINTS LAY SMOOTHER

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Drugs, Fine Chemicals

US producer instituted several law suits charging competitors with patent infringement. Status of the various cases is not known. Indicative of the outcome of at least some of the suits, though, is the one that has been settled finds one leading brewer no longer in the vitamin B_{12} business.

Tariff Commission's recent reclassification of medicinal vitamin B_{12} as a coal-tar derivative, which upped the duty, is also going to limit import competition.

Botanicals

Belladonna—Quote on belladonna leaves has been advanced to a range of from 25c. to 30c. a pound but the root is still listed at 35c. to 38c. a pound, the level established a few weeks ago. Higher shipping prices account for the changes, sources said.

Chamomile—Hungarian flowers are selling in the vicinity of $1 a pound, the Roman flowers anywhere from $1.75 to $2 a pound. Stability of these prices, which were posted early in the summer, indicates a rather tranquil market.

Irish Moss—Spot demand is large here and as supplies are tight, prices are very strong. Dealers who are fortunate enough to have some stock are getting up to 38c. a pound, reportedly.

Juniper Berries—Due to a smaller than normal crop, offerings from abroad have been limited, consequently driving up spot prices. Current level is 25c. to 30c. a pound.

St. John's Bread—Routine market conditions. Prices range from 17c. to 20c. a pound, the low of the spread a constant throughout most of 1961.

Stramonium Leaves — Moderate interest, adequate stocks are noted. Quote is 15c. to 20c. a pound.

Uva Ursi Leaves—Limited demand and recent receipt of new crop material has weakened the market. The quote is 14c. to 15c. a pound.

Witch Hazel Leaves—The schedule is unchanged at 35c. to 40c. a pound. Prices on the bark are slightly lower, however, at 20c. to 25c. a pound.

Drug & Fine Chemical Briefs

COLD PREPARATION: "Contac," a proprietary preparation for the relief of head cold congestion and hay fever has just been introduced by Menley & James Laboratories, newly-established subsidiary of Smith Kline & French Laboratories, Philadelphia. The drug contains phenylpropanolamine hydrochloride, chlorpheniramine and a mixture of belladonna alkaloids.

COUGH SYRUP FOR KIDS: Winthrop Laboratories, New York, is offering "Pediacof," a new cough syrup and nasal decongestant specially formulated for use by children. A bright-red, raspberry-flavored syrup, it contains codeine phosphate, neo-synephrine hydrochloride, chlorpheniramine maleate and potassium iodide.

NEW ELIXIR: Pharmich Laboratories, a division of Michigan Chemical Corporation, is offering "Neothylline Elixir," a cardiobronchodilator which produces direct myocardial stimulation and dilation of coronary and other circulatory vessels and bronchioles. The St. Louis, Mich., firm says its new prescription product provides all the advantages of theophylline while eliminating adverse effects.

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Epoxy Adhesives Trade's Problem: Handling for the Big-Volume Uses

Epoxy adhesives formulators are steadily chipping away at the handling problems which have limited use of these materials in big-volume industrial bonding applications such as curtain wall construction and floor and wall tile. Though epoxy resin use in adhesives is expected to total less than 3 million pounds this year, trade observers anticipate that improved formulations and easier methods of application will provide impetus to a sharper growth rate in epoxy adhesives than in epoxies as a group.

EPOXY RESINS: ADHESIVES USE

1965	4.0 million lbs.
1961	2.7 million lbs.
1960	2.3 million lbs.
1959	1.7 million lbs.
1958	1.2 million lbs.

As industrial adhesives, the epoxies have been found to offer high shear strength, high impact strength and high creep strength. They are extremely versatile in that they may be used to bond plastics of all types, ceramics, metals, and a wide range of other materials.

Some epoxy adhesives are available with tensile strengths up to 8,000 psi and with almost no loss in shear strength at moderately high temperatures. When used with various modifiers and curing agents, adhesives can be tailor-made to fit applications calling for varying degrees of impact strength, peel strength and flexibility.

Plastics Applications Growing

Plastics applications are felt to hold out the best hope for volume growth in use of industrial epoxy adhesives. Modified epoxies, which are 100 percent active, offer a particular advantage in working with plastic materials which may be attacked by solvents generally contained in other types of adhesives.

Although a relatively small percentage of plastic floor tile makes use of epoxy-based products, the water-proof bond provided by an epoxy adhesive would be a decided advantage, sources say.

Work is being done in cooperation with major can companies to develop a one-component epoxy which would replace solder in aluminum containers.

In the consumer market, epoxy glues avilable in hardware stores and supermarkets have also been arousing greater interest during the past year, although trade sources doubt they will capture a significant portion of the estimated $45 million consumer adhesives market unless a workable one-component system can be developed.

Products currently available are filled compounds or dispersed in ketone solvents and have limited potlife. Observers point out that lower-cost materials, based on polyvinyl acetate or nitrocellulose, have been available for many years and do an adequate bonding job in the average household application.

Rubber & Asbestos Corporation, Bloomfield, N. J., has just reported development of a new room-temperature-curing epoxy adhesive, formulated for industrial use, which can be mixed in a one-to-one ratio by volume instead of in odd ratios by weight.

This would do away with the need for scales, specially pre-weighed "kits," or other complicated metering and proportioning equipment. Thus, it's pointed out, unskilled workers can handle room-temperature-curing epoxy adhesive systems without fear of improper mixing or proportioning.

Lower Costs Expected

Aside from lower labor and equipment costs which are expected to result from the use of a one-to-one mix, the company reports that the new product, designated "Bondmaster M666," is priced at one-third to one-half less than most conventional formulations of equivalent strength.

In mass production panel bonding applications, for example, it's estimated that the cost per square foot of completed glue line is equal to or less than that of most solvent-dispersed "contact bond" types normally used for curtain wall and similar panel fabrication.

"Bondmaster M666" is a 100 percent reactive, epoxy adhesive developed for industrial use. It differs substantially from the conventional filled compounds or solvent-dispersed products currently being marketed for household applications, R&A reports.

Fully cured metal-to-metal bonds produced with the product, tested at room temperature using MIL-A-5090B procedures, yield up to 3,500 psi. Bonds involving expanded styrene foam withstand 175 degrees F. for 200 hours without cell attack, the company says.

The new adhesive is a two component system, part "A" colored cherry red and part "B" clear amber. It is made ready for use by simply mixing the two parts in equal volume until striations of color disappear and a uniform tint is achieved.

In application, the red color provides a check on missed spots which may be recovered at once. Pot life of a one-gallon mixture is 1½ hours and the product is said to develop 85 percent of its maximum strength in twenty-four to forty-eight hours. The bond continues to advance in strength for approximately a week.

Angier Adhesives Department of Interchemical Corporation carries a full line of two component and one component epoxy adhesives. The latter are generally for metal-to-metal bonding and are activated by application of heat. As a general rule, the company says, specific epoxy adhesives are tailor-made to specific end-uses.

The company reports one-part systems are currently being evaluated for use in sealing of aluminum containers. In this application epoxy adhesives would be used in place of solder now used.

Angier also says promising experimental results have been obtained in other metal-to-metal bonding applications, for example, an aluminum veneer to a stainless steel base

In the building field, Angier offers both two- and one-part systems for bonding aluminum, steel, plastic foam and wood. Two-component solvent-dispersed products are available for use with vinyl overlays on panels, or for bonding vinyls to wood or aluminum.

The company notes continued acceptance of epoxy adhesives for job site applications involving sheetrock and plywood. Use in pre-fabs is also on the increase.

Trade Name Briefs

DIMER ACID: Emery Industries, Inc., has marketed a new dimer acid tradenamed "Empol 1018." The product is reported to have an eight maximum Gardner color compared to eleven maximum for standard commercial "Empol 1022." The company says the product is designed to meet demands for a light-colored dimer acid for use in manufacture of surface coatings and resins.

ANTIOXIDANTS: Chemical Division of Goodyear Tire & Rubber Company has developed an improved antioxidant, tradenamed "Wing Stay V," for use in dry rubber compounds, rubber latex and rubber foam application.

According to H. R. Thies, division general manager, the product is also recommended as a stabilizer for all non-staining styrene and nitrile types of synthetic rubber during their manufacture.

The new product, described as an alkylated, styrenated phenolic compound, is the third in a series of such chemicals developed by Goodyear. It is said to contain a "bonus" feature in that once injected into a synthetic rubber it will continue to work as an antioxidant through the various production steps, including drying.

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Essential Oils, Aromatics

Lemongrass continues extremely tight with very few offerings at source and almost no material on spot. It is not so much a scarcity of material as it is a shortage of time for the distillation process. The recent heavy rains came at the time a large cutting of Indian lemongrass oil was to have been distilled. This distillation had to be delayed; hence, at a time when oil was expected to be plentiful, it was practically non-existent. Dealers on spot had let their supplies get very low, hoping to stock up on low-price, new-crop material. But they have not been able to buy nearly enough to meet their immediate requirements and prices are soaring. Just last week, listings rose from the previous $2.60 per pound, to $3 per pound.

Peppermint and spearmint continue weak, but their spot prices are unchanged. Reports continue to come in that sandalwood is weak, but spot prices continue unchanged. California lemon remains quite high with very little material on spot and no indication of when there will be any.

Algerian geranium continues firm due to the uneasy political situation at source, but Bourbon material is weak. It dropped $1 per pound recently. Tangerine also is weak. It dropped 50 cents per pound.

Holland's exportation of essential oils and related products increased in 1960 over 1959. In 1959, that country exported $50 million worth of soap, detergents and cleansing agents whereas they exported $53 million in 1960.

In 1959, Holland exported $19.5 million worth of essential oils, synthetic perfumes and essences, whereas they exported $21 million in 1960.

In 1959, Holland exported $19.5 million worth of cosmetics, polishes and lubricants, whereas they exported $22 million in 1960.

Vanilla beans were reduced slightly on spot. Bourbon beans now range between $6.75 and $7 per pound; Mexican cut beans now range between $7.50 and $7.70 per pound and Mexican whole beans now range between $7.80 and $8 per pound.

Price Trends

Advanced
Lemongrass, 40c. per lb.

Reduced
Geranium, Bourbon, $1 per lb.
Tangerine, 50c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Sept. 30, 1960
142.96	142.97	143.44	144 92

For Current Prices See Page 10

Essential Oils

Geranium—Bourbon material continues to weaken. From its previous price, $15 per pound, it has dropped to $14 per pound. Algerian material, due to political difficulties at source, continues firm. Spot price continues at $21 per pound.

Approximately half of the world's supply of geranium oil comes from the island of Reunion, with considerable amounts coming from Algeria, Russia, Morocco, Colombia, Japan, Italy, France, Spain, El Salvador and eastern and western Africa.

Some spokesmen estimate that only some 22,000 pounds per year are produced in Algeria.

Juniper Berry — Dealers report that material is moving in good volume with prices unchanged.

Common juniper, *Juniperus, communis*, grows in most sections of the world. It is found in many parts of Europe and Asia—as far east as the Himalaya Mountains. It is found in the United States as far south as Pennsylvania, and as far west as California.

It takes two years for the berry to mature, according to agricultural reports. Various beverages, especially the gin and sloe gin varieties, owe their characteristic flavor to the juniper berry.

Lavandin—The same drought that has caused the lavender market to firm at source, has strengthened the lavandin market as well.

Estimaters in France predict that the 1961 crop of lavandin oil will be roughly 300 tons less than was available last year. Production in 1960 was approximately 800 tons with a carry-over of some 200 tons. Production this year is expected to be 600 tons with a carry-over of only 100 tons.

Lavender—Reports from one of the large French producers say that the 1961 crop of lavender will be quite short. This shortness, the report states, was probably caused by the frost which has struck various growing areas during the last few weeks—especially in the Vaucluse region where most of the lavender of average ester titration is produced.

Also responsible for the small crop is the drought during the past six months.

This company estimated the 1960 crop to be 100 tons with a carry-over stock of some 20 tons, totaling 120 tons. They estimate the 1961 crop to be only 40 tons with a carry-over stock of 20 tons, totaling only 60 tons.

The consumption of lavender oil throughout the world remains relatively low, according to trade spokesmen here in New York. Some six years ago, the price of lavender doubled and formulators switched to more plentiful and cheaper lavendin, a hybrid.

But in spite of the decline in popularity of lavender, the above-mentioned unfavorable weather conditions have caused prices at source to advance some 30 percent.

Lemongrass—News from India is that the market is extremely tight. Prices continue quite high on spot with dealers asking as much as $3 per pound for their material. Previous high had been $2.60 per pound.

Some time ago, we reported that this year's crop was in danger because of the very heavy rains. This undue wetness has not actually damaged the grass, it has been reported, but it has hindered distillation.

And because distillation has been held up, there are few offerings. Buyers had held off replenishing their stocks awaiting the new crop material and now that they have used up all their reserve, they are forced to buy at any price.

Patchouli—Spot price continues weak at $5 per pound, according to reports from essential oil dealers here in the New York area.

This oil, which is somtimes spelled patchoully, first came to the attention of Europeans in the middle of the 19th century. For generations, dealers in imported fabrics claimed they could tell the difference between an imitation fabric and the genuinine Indian cloth, by smelling it.

The real thing had a strange odor and the fake did not.

In 1844, these dealers figured out what had been happening. When the first shipment of dried patchouli leaves arrived in London the fabric dealers realized that these dried leaves smelled exactly like the genuine Indian fabric smelled.

Obviously, they surmised, the Indian weavers had learned that it was to their advantage to scent their wares with this strange odor.

French weavers got wind of this fact and soon began scenting their own fabrics with patchouli and helped to break up the Indians' monopoly on exotic cloth.

Sandalwood—Reports continue to come in that sandalwood oil is weakening. Spot prices, however, continue up towards the $30 per pound level.

Tangerine — Dealers report that Floridian tangerine oil has dropped considerably in price. On spot, listings have been reduced from $4.75 per pound to $4.25 per pound.

Production of domestic oil is said to be over 20,000 pounds per year. The tangerine tree is found in Florida and Texas in the United States and also in Guinea, and the western part of Africa.

Seeds and Spices

Anise Seed—Mexican material has advanced in price as has Turkish material. Mexican has advanced from 28c. per pound to 30c. per pound and Turkish material has advanced from 26c. per pound to 28c. per pound.

Ginger—All grades of ginger are firm, and many have advanced in price. Cochin advanced from 20c. per pound to 23c. per pound; Sierra Leone advanced from 32c. per pound to 33c. per pound;

Essential Oils

Jamaica No. 3 has advanced from 26c. per pound to 32c. per pound, and Nigerian split has advanced from 24c. per pound to 26c. per pound.

Nutmegs—Both East and West Indian material remain right around the 95c. per pound level.

Onion Flakes — Bulgarian material continues to advance in price. From its previous price, 41c. per pound, it has risen to 43c. per pound. Three weeks ago, it was listed at 39c. per pound.

Pepper—Malabar black is quoted at 46c. per pound, Lampong black, at 45c. per pound and Muntok white at 53c. per pound.

Turmeric—Jamaican material is said to be firm.

Vanilla Beans—Slight easement was reported by vanilla bean dealers. Bourbon material now ranges between $6.75 and $7 per pound; Mexican cut now ranges between $7.50 and $7.70 per pound, and Mexican whole now ranges between $7.80 and $8 per pound.

Total imports of vanilla beans during 1960 amounted to 1,047,683 pounds. This material was valued at $11,390,492. These figures are from the Department of Commerce.

Essential Oils Briefs

NEW PHILADELPHIA SALES OFFICE: Florasynth Laboratories, Inc., New York, has recently opened a sales office in Philadelphia. The address is 1418 Walnut Street, Philadelphia 2, Pa.

Drug Act Neutralization Now Proposed in Britain

A move to take control of drugs out of the food and drugs act in Great Britain is proposed by D. C. Garratt, chairman of the British Pharmaceutical Conference.

Mr. Garratt wants a new "Medical Substances and Preparations Act" passed by Parliament to be aimed specifically at drugs. Standards for drugs should be set by a medical group such as the General Medical Council and control of drugs should be vested in the Ministry of Health, Mr. Garratt argues.

Pfizer, Bristol Reduce Synthetic Penicillin Tabs

Two pharmaceutical makers have reduced listings on synthetic penicillin. Down 15 percent are prices of "Maxipen," produced by the J. B. Roerig & Co. division of Chas. Pfizer & Co., and "Syncillin," a product of Bristol Laboratories, a division of Bristol-Myers Company.

Bristol is also reducing by 10 percent its "Staphcillin," a relatively new synthetic penicillin which was introduced in November, 1960.

Johnson & Johnson Buys

—*Continued from page 5*

expected to strengthen Johnson & Johnson's market position in the ethical pharmaceuticals being made available to the European Common Market. The Janssen company has been in the pharmaceutical business in Belgium since 1934, and during the last four years reportedly has engaged in a more intensive pharmaceutical research program.

Among the products developed by Janssen research is a series of drugs for treatment of the central nervous system, including anticholinergics, antipasmodics, analgesics, and antidiarrheals. Janssen maintains its own marketing operations in Belgium, Holland and Germany.

Phenindione, Anti-Coagulant, Given a New Warning Label

Food & Drug Administration has announced a new warning label for phenindione, a synthetic anti-coagulant drug marketed by several drug companies.

"In view of the potential serious effects found to be associated with preparations of this drug," Commissioner of Food & Drugs George P. Larrick said, "the labeling on or within the package from which the drug is to be dispensed and any other literature furnishing information for use of the drug will bear a conspicuous warning statement as follows:

"Warning: Agranulocytosis and hepatitis have been associated with the use of phenindione. Patients should be instructed to report promptly prodromal symptoms such as marked fatigue, chill, fever, and sore throat. Periodic blood studies and liver function tests should be performed. Use of the drug should be discontinued if leukopenia occurs or if evidence of hypersensitivity, such as dermatitis or fever, appears."

Essential Oil Ass'n Chooses Colgate in Scholarship Debut

Essential Oil Association has kicked off a three-year scholarship program with the choice of Colgate University as the first recipient.

Colgate has received a $1,000 scholarship under the program for the 1961-1962 year. The money will be given to qualifying students during their junior and/or senior year.

The only requirement set up by the association is that the student be pointed toward a business career and not a professional school.

According to Edwin J. Manheimer of J. Manheimer, chairman of EOA's scholarship committee, the scholarships are designed to acquaint collegians with the possibilities of a career in the essential oil and aromatic chemicals field.

Obituaries

Dr. Lester C. Faulkenberry

Dr. Lester C. Faulkenberry, assistant general manager of Eastman Kodak Company's Kodak Park Works in Rochester, N. Y., died September 26 in that city He was fifty years old.

Dr. Faulkenberry, a chemist, joined Kodak in 1936. In 1951, he was named assistant superintendent of the film emulsion coating division. He became administrative assistant to the general manager in 1956, and was appointed in January, 1960, to the post he held at his death.

Archibald H. Rowan

Archibald H. Roman, former board chairman of the American branch of Albatros Superfosfaatfabriecken, a Dutch chemical fertilizer firm, died September 21 in Princeton, N.J. He was eighty-two years old.

Dr. Rowan, an agricultural expert, had a varied career that included a term as president of the US Chamber of Commerce in England. During twenty years in London, he served as director of the Phosphate Export Association. He retired in 1947.

Dr. Henry V. A. Briscoe, retired British chemist and educator, died September 24 in London. He was seventy-two years old.

Charles-Alexandre Lambert, top executive in a number of French petroleum companies, died September 23. He was sixty-four years old. M. Lambert was president of the Southern European pipeline, which will go into service next year to carry oil from southern France to Karlsruhe, Germany.

S. Ken Tyson, technical sales representative for Archer-Daniels-Midland Company in Chicago, died September 7 in Highland Park, Ill. He was fifty-two years old. Mr. Tyson handled sales of oil to the paint industry.

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Coating Materials

No prices changed in this market section last week, and there are almost none in immediate prospect. The 2 cent per pound reduction in aluminum metal may be reflected later in aluminum paste and powder pigments, but to what extent is a matter for conjecture. Aluminum pigment prices have long been firm, against which there has built up very considerable accumulated increased costs in labor, manufacturing, and shipping.

So far manufacturers have been absorbing these increased costs, and profit margins have consequently narrowed unreasonably. Even if there were no pigment price changes, manufacturers would still be burdened with absorbed costs. Accordingly any developing price reduction that might occur will be more the result of competitive consumer pressure rather than sound economic pricing.

The new price schedules on titanium pigments, mentioned in previous issues, can reasonably be regarded as simply a new quantity pricing set-up, rather than any actual change in titanium dioxide as such. Business volume of titanium pigments is well sustained, and showing a definite Fall upward demand curve which is felt likely to continue well into the fourth quarter.

The stepped up production of automobiles for the new models is resulting in increased demand for automotive paints and lacquers with consequent better business volume in pigments, solvents, resins, and plasticizers. Other hard durable goods are being turned out in greater volume, which likewise is reflected in better demand for industrial finishes.

The water thinned paint section of the market, made from latex or resin emulsions, continues to grow both in physical volume and in improved products via research and better technology. However, while the interior wall type coatings have met with almost universal trade acceptance, the progress both technically and marketwise of exterior coatings, other than masonry finishes, is a slow tedious process.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Sept. 30, 1960
104.69	104.69	104.71	103.13

For Current Prices See Page 10

Prime Pigments

Aluminum Paste and Powder—As of press time, the 2c. per pound drop in the price of aluminum metal effected last week has not been reflected in the price structure of aluminum paste and aluminum powder pigments. That it will be reflected is felt rather certain in the industry but the extent of any such reduction is at this time a matter for conjecture.

One thing is certain, aluminum pigment manufacturers have been maintaining an unchanged price schedule, against steadily increasing costs for a long time. Even if paste and pigment undergo no price change, the accumulated costs which they have been absorbing in labor, manufacturing, and shipping will leave manufacturers with an all too narrow margin of profit.

Chrome Colors—The Bureau of Census reported July production of chromium oxide green as amounting to 863 tons, as against the 646 tons turned out in June, and 305 tons in July of last year.

The combined output in July of C.P. chrome yellows and chrome oranges totalled 1,159 tons, compared with June production of 2,410 tons and the 1,234 tons turned out in July of 1960.

Molybdated Chrome Oranges were produced in the amount of 362 tons in July, a considerable drop from the 699 tons produced in June, and slightly above the 321 tons made in July a year ago.

Demand for chrome colors is described as well sustained with September indicating an upturn in business volume likely to carry over well into the fourth quarter. Prices are firm and expected to hold for the balance of the year.

Titanium Dioxide—The Bureau of Census reported July production of titanium dioxide as amounting to 42,293 short tons, as compared with 44,843 tons in June and 33,393 tons in July of last year.

While it is true that early this month titanium dioxide pigments underwent a pricing adjustment, it is reasonable to say that there was no change in the price of titanium pigments as such. What the changes amounted to was a change in pricing pattern.

This involved setting up of a larger quantity sales bracket in which buyers of a 30-ton minimum carload are afforded a price of 25c. per pound on anatase and 27c. per pound on rutile. Buyers who purchase in somewhat smaller quantities were given the advantage of buying in 20-ton carloads or 15-ton truckloads, minimum shipment, at a price of 25½c. for anatase and 27½c. per pound for rutile. Purchases made in five ton lots minimum per shipment get a price of 26c. per pound for anatase and 28c. for rutile. Less than five ton lot buyers pay 26½c. per pound for anatase and 28½c. for rutile.

Buyers of titanium calcium pigment in 30-ton quantities get a price of 9⅛c. per pound on the 30 percent pigment and 14⅛c. on 50 percent pigment.

Inert Pigments

Mica—Demand for wet ground mica as a partial extender pigment in house paints has been rather routine, but picked up significantly in September pointing toward a good Fall demand. Price patterns long in effect are still firm and unchanged, the 325 mesh paint grade being listed at 8¼c. per pound in carlots.

Talc—Magnesium silicate extender pigments are among the most widely used. As a builder of pigment volume concentration in exterior paints, talcs have been the staunch standby of the paint manufacturing industry for many years. The use of talc in enamels and other types of finishes has developed significantly with the marketing of the fine particle size grades ranging upward to 625 mesh.

Whiting—Natural water ground calcium carbonates still find wide use in interior coatings and certain other coatings. However, the precipitated calcium carbonates, both straight and surface treated have attained a dominant place in the calcium carbonate market where considerations of color, purity, and other characteristics are concerned.

Synthetic Resins

Acrylic lacquer use in the automotive field is running into very substantial volume, and has met with quite good customer acceptance. While these lacquers are mostly used in the automotive field because of their extremely good durability on long sustained outdoor exposure, their use in other fields is not a matter of rapid growth. This may be partly due to high cost, and to the equipment involved in their application.

Acrylic emulsions in interior finishes have met with very good trade acceptance because of their ease of application and good washability. In exterior house painting, acrylic emulsions are finding increasing use, but progress in this direction is slow because of uncertainties in the minds of potential users about adhesion and performance over previously oil based painted surfaces.

A very considerable educational job has to be done in their promotion and best manner of application. However, whether in solvent thinned or water thinned coatings, the acrylic resin business is definitely on the upgrade.

Miscellaneous

Casein—Prices have tended over the past two to three weeks to fluctuate very slightly, usually not more than ⅛c. Offerings, according to the Agricultural Marketing Service of USDA, have been very light. Prices on Argentine for the period ending September 22 were mostly in the range of 18½c. to 19c. per pound on Argentine, but some trading was done as low as 18⅜c. Polish is listed at 18½c. to 19c. per pound. New Zealand casein moved to established outlets at 24c. to 25c.

Shellac—As the month of September ended, reports are to the effect that busi-

Coating Materials

ness showed an upturn as against previous months, but was not as brisk as might be expected at this time of year. However, dealers are looking to an October of very much stepped up interest and activity. Prices are holding steady.

Lacquer Materials

Early this month prices on phthalate esters, widely used as plasticizers in the protective coating and plastic industries, underwent a downward adjustment reflecting the lower price schedule on phthalic anhydride. Plasticizers listed in the price section of OPD were duly and promptly reported. However, it should also be reported here that the new price schedules which went into effect in early September but are not reported weekly in OPD on certain plasticizers are as follows:

Di-isodecyl phthalate is listed in tankcars at 24c. per pound, in drum carlots at 26½c., and in less than carlot drum quantities at 28c. Iso-octyl decyl phthalate is set at this same schedule of prices.

n-Octyl n-decyl phthalate in tankcars is quoted at 28c. per pound, drum carlots at 30½c., and less than carlot drum quantities at 32c. per pound. Ditridecyl phthalate in tankcars is listed at 27½c. per pound, carlot drum shipments at 30c., and less than carlot quantities at 31½c. per pound.

Certain non-phthalic plasticizers which in certain end-uses are competitive with the phthalates were subjected to downward price adjustment by virtue of competitive pressure from the reduced phthalates. A case in point are dioctyl adipate and di-isodecyl adipate, which under their new price schedules are listed at 35c. per pound in tankcars, 37½c. in drum carlots, and 39c. in less than carlot quantities.

Among the sebacate plasticizers, the dioctyl went down in price along with the phthalates. Under the new schedule, tankcars are quoted at 57c. per pound, carlot drum quantities at 59c., and less than carlot drum shipments at 59½c. to 60c. per pound, depending upon quantity.

Di(2-ethylhexyl) adipate is listed in some quarters at 36c. per pound in tankcars, 38½c. in drum carlots, and 40c. in less than carlots Di (2-ethylhexyl) azelate tankcar prices are now 41c. per pound, drum carlots 43½c., and less than carlots 45c.

Naval Stores

According to USDA, the average crude gum rosin price for the week ending September 16 was $33.10 per standard barrel, as compared with the same price for the previous week, and $45.40 one year ago.

For the week ending September 22, the over-all rosin sales were 6,916 drum equivalents compared with 4,206 last week and 3,917 the week before. Sales f.o.b. plants—prompt, drums, were priced at WW $11.80 to $12.50 mostly $11.80 to $11.90; WG $12.30, Nancy $11.90 to $12.25; M and below $11.70 to $12.15. Tank cars Nancy $11.20 to $11.25, M and below $11.25. Bags WW $11.61 to $12.40 WG $12.20 Nancy $11.46 M and below $11.46 to $12.05 mostly $11.50 to $12.05. Forward drums WG $11.60 to $12.50, Nancy $12.25.

Sales export fas ports, drums, prompt, WW $11.91 to $12.15 mostly $11.95 to $12.15, M and below $11.82. Forward, WW $12.00 to $12.25, WG $11.90 M and below $11.82. Forward, WW $12.00 to $12.25, WG $11.90 M and below $11.80.

Over-all turpentine sales were 70,800 gallons compared with 257,075 gallons last week. Tank cars fob plants prompt 23 to 24c. forward 23c.

Drums export fas ports prompt—used black iron 39c.

Average price paid producers for commercial pine gum last week was $33.10 per barrel. Receipts of 23,200 barrels were 5,800 more than same week last year. Loan receipts 17 percent.

Coating Materials Briefs

GLOSSY POLYETHYLENE WITH SLIP: A new polyethylene formulation which produces glossy coatings having a low coefficient of friction is now available from Eastman Chemical Products, Inc. The new formulation, designated "Tenite Polyethylene 1H55P Natural," contains a special slip additive capable of withstanding the high—up to 600° F.—melt temperature required in extrusion coating. Up to this time, most slip additives for polyethylene have tended to volatilize or decompose at extrusion-coating temperatures, making it necessary to lower the coefficient of friction in coatings by giving them a matte finish or by dusting or spraying them with a slip agent after extrusion. These methods, however, usually left the coated surface dull and unattractive. With "Tenite Polyethylene 1H55P," they are no longer necessary.

NEW POLYETHYLENE RESIN: The U.S. Industrial Chemicals Co., division of National Distillers and Chemical Corp., New York announces "Petrothene 263-66," a new resin for extrusion of thin gauge blown films. This resin yields high clarity, high gloss garment bags with good tear strength, the company says. The medium density (0.923) resin has also exhibited excellent processing characteristics at high extrusion speeds, with 0.38 mil film extruded in excess of 200 feet per minute with no breaks.

MacIntyre Is Sworn In As New FTC Commissioner

A. Everette MacIntyre, who has been serving as staff director and chief counsel for the select committee on small business of the house of representatives, was sworn in last week for a seven-year term as a member of the Federal Trade Commission.

Mr. MacIntyre, a Democrat, succeeds Robert T. Secrest, also a Democrat, whose future plans have not been disclosed. Mr. MacIntyre was an attorney with the FTC from 1930 to 1955. He was particularly active in the antitrust field.

FDA's Dubious Distinction

—Continued from page 5

public will be provided with sound products," the report continues.

"However, as a result of the inconsistent policy, the public is supplied with products by certain manufacturers who would pay for the services in the case of antibiotics and would not pay in the case of biologics.

"It would seem that the question to be resolved with respect to these activities is whether a general exception from the user charges policies for all these activities is warranted on the basis of general benefits to the public or whether industries are deriving specific benefits for which charges should be assessed.

"We believe HEW's certification, testing and licensing activities should be reexamined with a view to determining whether these services should be subjected to a consistent application of or excepted from the general user charges policy."

In connection with the question of fees, GAO also notes that the FDA has accumulated a fund of $890,000 in fees in excess of the cost of its certification work, which it plans to use in the future for purchase of equipment for a new headquarters building now being erected.

Because the accumulated reserve is substantial in relation to the annual revenue from certification activities, GAO recommends that the HEW Secretary inform the appropriations committees of congress of the reserve and the planned use of this money.

It also wants FDA to take steps to periodically adjust its fees in the future to avoid any unnecessary accumulation of these funds.

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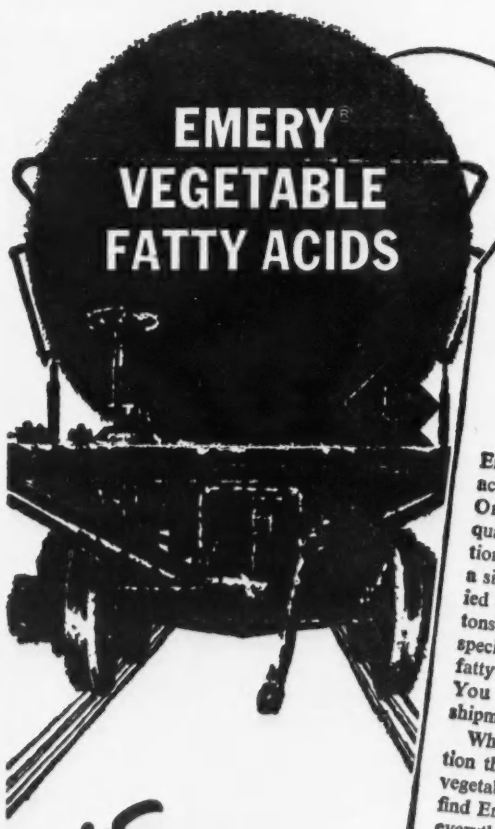

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Oils, Fats and Waxes

Feature of the oils and fats last week was the continued upward price movement of tung and corn oils. Tung oil advanced another ½ cent to the highest level since March 1953 because of limited stocks coupled with the withdrawal of offerings of government oil until inventory is taken of reduced holdings. Corn oil also was scarce, advancing one cent to the highest price since May, 1951. Consumers, however, continued to limit purchases to nearby requirements.

Demand for most oils continued spotty, chiefly for actual needs. Among edible vegetable oils, cottonseed was the weakest dropping ½ cent because of increased stocks of new crop. Peanut oil also was lower off ½ cent reflecting cheaper oil from abroad. Production of new crop peanut was at a standstill. Soybean oil moved narrowly with futures closing about unchanged for the week. Crude coconut oil was easy and slightly lower, with copra.

Tallow and greases were unchanged but steadier owing to some improvement in export business. Domestic demand was still confined to actual needs. Offerings were lighter.

Linseed oil was in good demand against contracts as was oiticica. Brazilian castor oil was unsettled and sold at the lowest since August 1959. Other industrial oils were quiet and unchanged.

The Department of Agriculture last week announced plans to purchase soon one-half of the 400 million pounds of vegetable oil products to be donated in 1962 for distribution among needy people in foreign countries. CCC will call for deliveries of the initial 200 million pounds of vegetable oil during the period Nov. 15, 1961 through March 31, 1962. Contracting for the purchase of the remaining 200 million pounds will be completed before June 30, 1962.

Price Trends

Advanced

Corn oil, crude, 1c. per lb.
Refd., 1c. per lb.
Olive oil, spot, 5c. per gal.
Tung oil, ¼c. to ½c. per lb.

Reduced

Carnauba wax, No. 2, crude, 1c. per lb.
No. 3, Ceara, crude, 2c. per lb.
Parnahyba, 2c. per lb.
yellow, No. 1, 2c. per lb.
Coconut oil, crude, ⅛c. per lb.
Copra, $2.50 per ton.
Cottonseed oil, crude, ½c. per lb.
Refd., ½c. per lb.
Lard, cash, 1/5c. per lb.
Peanut oil, crude, ½c. per lb.
Refd., ½c. per lb.
Soybean meal, $1.50 per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Sept. 30, 1960
110.79	110.94	116.10	107.76

For Current Prices See Page 10

Vegetable Oils

Castor—Demand was slow. No. 1 Brazilian was quoted at 16¾c. per pound, tankcars, New York, prompt delivery, but shadable on firm bids. Domestic grades were in fair request, chiefly for prompt needs.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	4,692,000
Previous week	.....	4,056,000
Corresponding week, 1960	.....	1,976,000
Total this year	.....	69,624,000
Corresponding period, 1960	3,353,453	67,940,099

Coconut—GSA last week sold 7,192,849 pounds of crude coconut oil at prices ranging from 10.49c. to 10.93c. per pound, bulk, according to f.f.a. to one of the largest soapmakers in the country.

Offers of crude were held at 10⅞c. per pound, tankcars, f.o.b. Pacific coast for prompt shipment. The New York market was easier and merely nominal at 12¼c., tankcars, prompt delivery.

Corn—Crude continued to advance and sold at 20c. per pound, tankcars, f.o.b. mills, prompt shipment, the highest level since May 1951. Offers were scarce. Refined oil was higher at 24.73c., tankcars, New York basis.

Cottonseed — Futures market backed and filled and closed practically unchanged on the New York Produce Exchange last week. Trading was light and professional, with commission houses on both sides. Weakness in crude oil was reflected in cash oils, which dropped ½c. per pound. Refined salad was inactive and declined to 16⅛c. per pound, tankcars, New York, prompt delivery.

Crude oil was lower and sold at 12⅛c. per pound, tankcars, October shipment in the Valley. The southeast ranged from 12¼c., Alabama and 12½c., Alabama-Georgia. Waco was 12c., asked.

Disappearance of refined cottonseed oil in August was indicated at 1,871 tankcars against 1,784 in July and 2,179, August, 1960. Visible supply was estimated at 4,186 tankcars at end of August compared with 4,376, a year ago.

Cottonseed Crush: August

Cottonseed received and crushed and production of cottonseed products during August and July, 1961, as compiled by the Bureau of Census, follows:

Cottonseed

	August	July
	Tons	
Receipts at mills	177,800	91,000
Crushed or used	144,400	143,100
Stocks at mills	221,900	188,500

Crude Oil

	Pounds	
Produced	48,900,000	48,100,000
Stocks at mills	5,900,000	5,200,000

Cake and Meal

	Tons	
Produced	68,600	66,600
Stocks at mills	89,400	142,600

Hulls

	Tons	
Produced	34,800	34,300
Stocks at mills	80,300	95,400

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, September 29, follow:

	Sales	Cents per Pound High	Low	Close
Oct.	121	13.73	13.56	13.72@13.75
Dec.	235	13.63	13.45	13.61 S
March	100	13.76	13.58	13.72 S
May	128	13.86	13.68	13.80 S
July	9	13.84	13.70	13.80 Bid

Total sales and switches, 613 contracts.

The Department of Agriculture last week that cottonseed oil acquired by the CCC under the 1961 cottonseed price support program will not be sold in commercial channels at less than the higher of:

(1) the market prices for similar cottonseed oils at the time and place of sales, or

(2) 105 percent of the average investment cost to CCC, calculated monthly, for all cottonseed oil delivered under the program up to that time. This policy will remain in effect until Sept. 30, 1962.

Olive—Firmness of replacements from Spain was reflected locally and oil on spot advanced 5c. per gallon. Sales took place at $2.40 to $2.45 per gallon drums, exwarehouse, depending upon quantity. Spanish oil was strong, with sales reported at $52.50 per 100 kilos, drums, f.o.b. port, October shipment.

Peanut—This market was easier, reflecting cheaper foreign oil imports. Crude sold down to 18c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined was reduced to 21¼c., tankcars, New York basis.

Approximately 11 million pounds of peanuts were crushed for oil and meal during August compared with 23 million in July and 14 million, August 1960.

Soybean—Crude rallied last week and closed unchanged at 10½c. per pound, tankcars, unrestricted, Decatur, prompt shipment. Refined salad was quiet and unchanged at 12¾c., tankcars, New York, prompt delivery.

Disappearance of crude soybean oil in August totaled 5,873 tankcars compared with 5,177 in July and 7,845 August last year. Visible supply at end of August was estimated at 11,362 tankcars against 6,230, a year ago.

Soybean oil exports jumped to 84.4 million pounds in June, the largest monthly export volume since January, mainly because of the 61.1 million pounds of oil sold to Spain for dollars, according

Oils, Fats and Waxes

to the Foreign Agricultural Service. Exports of soybean oil to all destinations during October-June were one-fifth less than last year. Exports to Spain were 259.3 million pounds against 225.7 million through June of last year, and accounted for almost one-half of the total oil exported. As of June 30, about 62 million pounds remained to be exported to Spain from the early spring purchase of 75,000 metric tons (165 million pounds).

Tung—Price trend of tung continued upwards and advanced ¼c. to ½c. per pound. Trading was light, chiefly for actual needs at 30c. per pound, tankcars, New York for nearby delivery with sellers holding ¼c. to ½c. more. Stocks were light and offers of government held oil have ceased until further notice. Drums were higher ranging from 32c. to 32½c., spot, according to quantity.

CCC sold 140,000 pounds of government held tung oil at 29.55c. per pound and 60,000 pounds at 29.64c., bulk, f.o.b. Marrero, La., Gulfport, Miss., last week. Previous sales were made at 29.26c. per pound, same basis a week ago.

Miscellaneous

Cocoa Butter — Demand was spotty. Prices were lower at 54c to 59c per pound, spot, depending upon quantity.

Copra—Prompt shipment was lower and quoted at $150 per ton, c.i.f Pacific coast.

Flaxseed—Easier tone prevailed in cash flaxseed, bids dropping 3c. a bushel to $3.62, spot and to-arrive basis Minneapolis. Only moderate volume traded ahead of the decline. Rains delayed harvesting in late areas, but gathering is near completion. Late flax in the northern territory is light in test weight and high in moisture. Discounts are severe.

Fats and Greases

Greases—Trading was confined to actual needs. Lighter offerings steadied the market at prevailing quotations. Choice white was nominal at 7½c. per pound, tankcars, delivered and yellow grease, 5c. to 5⅛c., same basis.

Lard—Market was easier and fractionally lower. Cash lard declined to 7.95c. per pound, drums, Chicago.

Tallow—Some improvement in export business gave the market a steadier tone. Domestic demand was reported light. Bleachable fancy was unchanged at 5⅝c. per pound, tankcars, delivered; guaranteed fancy was nominal at 6⅜c.; prime, 5½c.; special, 5¼c. and No. 1, 5c. same basis. Guaranteed fancy was nominal at 6⅜c., bulk, f.o.b. steamer and 1c. more for drums f.a.s.

Cake and Meal

Cottonseed Meal—Supplies are increasing and close to the peak of the season. Demand was fair. Meal 41 percent was quoted at $55 to $56 per ton, sacked in the Mississippi Valley and $58.50, Alabama-Georgia, and $60, Carolinas for October shipment.

Linseed Meal—Slow demand prevailed for linseed meal, prices barely holding. Processor buying because of curtailed production checked weakening tendency. Extracted meal, 34 percent protein, was quoted at $54 a ton, bulk, in carlots, f.o.b., Minneapolis for prompt delivery; $55, last half October through December. Old process expeller meal was unchanged at $60.50, prompt, some trades at concessions.

Soybean Meal—Signs of stability were apparent in this market after preceding week's precipitous drop. Prices declined additional $1.50 in most markets after short-lived small gains. Meal, unrestricted billing, 44 percent protein, was held $51 per ton, bulk, Decatur, prompt delivery, 50c. to $1 discount for deferred.

Waxes, Vegetable

Consumers continued to limit purchases to prompt needs. Carnauba grades were easier because of the lower cruzcerio which brought freer offerings for shipment at slightly lower levels. This combined with quiet demand was reflected in the local market and quotations were off about 2c. per pound. No. 3 Ceara, crude was quoted at 58c. to 60c. per pound, as to quantity for prompt delivery and Parnahyba, was 2c. more. Yellows were also easier and No. 1 Ceara ranged from 90c. to 92c., prompt delivery and Parnahyba, 92c. to 94c., as to quantity.

Refined beeswax was in fair demand and steady at prevailing quotations. Crude beeswax was unchanged and firm with the strength of replacements from primary sources.

Candelilla, ouricury and Japan waxes were well held at former quotations.

Soybean Crush: August

Soybeans received and crushed and production of soybean oil and meal during August and July, 1961, as compiled by Bureau of Census,

Soybeans

	August	July
	Tons	
Receipts at mills...	314,500	424,000
Crushed or used...	901,000	929,100
Stocks at mills	401,200	987,900

Crude Oil

	Pounds	
Produced	333,900,000	345,100,000
Stocks at mills.....	134,000,000	*134,000,000

Cake and Meal

	Tons[1]	
Produced	703,800	732,100
Stocks at mills	179,800	210,700

[1] Includes millfeed (hull meal.)
* Revised.

Minnesota Linseed Oil Sold to Farmers' Grain

Minnesota Linseed Oil Company, Minneapolis, Minn., now belongs to Farmers' Grain Terminal Association (GTA), St. Paul, Minn.

The linseed oil company was purchased from Minnesota Paints, Inc., Minneapolis, and National Lead Company, New York, both of which owned a half share. Minnesota Linseed converts about 8 million bushels of flax to 120-150 million pounds of linseed oil each year. It will continue operating under GTA without change in procedure or personnel.

Chemway Sets N. J. Land For New Industrial Park

Chemway Corporation will sell a major tract of land at Wayne, N. J., to one of its subsidiaries for development as an industrial park. The work will be done in consultation with James M. Rice Associates, a planning firm at Maywood.

The property of 235 acres will accommodate about twenty light industrial or research enterprises which could employ up to 4,500 workers, Chemway says.

DuPont-GM Measure

—Continued from page 3

titure plan submitted by the duPont company. By resort to the senate's rule of unlimited debate they were able to forestall action.

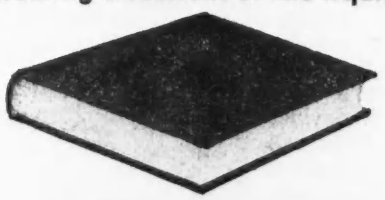
If given a chance to vote it was generally thought that the senate would overwhelmingly approve the bill. The bill passed the house September 19 by a simple voice vote and was reported to the senate two days later by a 14-to-2 vote of the finance committee.

The long delay now facing the bill, with a decision by the court probable in the meantime, makes the outlook for the bill now questionable.

The government is expected to file its reply to the divestiture plan of duPont this week. The court, according to Sen. John J. Williams of Delaware, will render its final decision on December 2 on acceptance of the plan. Divestiture must then begin within ninety days if the plan is approved.

Sen. Williams also said that an agreement had been reached between the Department of Justice, the Treasury Department and the duPont company enabling the chemical company to divest itself of its General Motors stock within three years if the tax relief bill is passed. The Supreme Court's edict of last year says that complete divestiture must take place in no longer than ten years.

an engineering treatment of the liquid extraction process



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HERE, for chemists, chemical engineers and others in the chemical industry, is a complete review and organization of the subject matter of the unit operation of liquid-liquid extraction. This unique volume not only sets forth the known facts concerning liquid extraction, but also outlines potentialities and limitations of applying extraction to separation problems. It correlates heretofore apparently unrelated data, gives detailed references to original sources of information, and many diagrams, essential equations, illustrative examples worked out in detail to insure understanding of material presented.

From the means of predicting equilibria—principles to follow in choosing a solvent for a liquid extraction process — through the methods of estimating diffusitives in liquid solution — to the design of extraction systems (including flowsheets and equipment) — and liquid-extraction processes used in industry, every important aspect of the subject is covered.

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Tung Oil and Nuts to Be Topics for Imports Hearing

The Tariff Commission will hold a public hearing October 24 on tung oil and tung nut imports, as part of its investigation into the necessity of continuing import quotas on these materials.

The investigation is in response to a request of President Kennedy, who has been advised by the Department of Agriculture that circumstances concerning the tung oil supply situation have so changed as to raise a question whether the President's proclamation of October 27, 1960, should remain in force.

Under terms of the proclamation, imports of tung oil and tung nuts will be under quota restrictions through October 31, 1963. Persons desiring to attend the public hearings should notify the commission's secretary by October 21.

Foster Wheeler to Build S. Africa Oil Refinery

Foster Wheeler, Ltd., English subsidiary of the New York-based construction company, has been awarded a contract by South African Petroleum Refineries Pty., Ltd., for a 70,000 barrel-a-day refinery at Reunion Rocks, South Africa.

The project reportedly represents the fifth complete refinery contract awarded to the English company during the last four years. The contract calls for design, engineering, procurement and construction of the refinery.

Borden Chemical to Sell Alum from Coal Waste

Borden Chemical Company and North American Coal Corporation have signed an agreement naming the chemical firm as exclusive sales agent for the coal company's alum products to the US paper industry. The alum will be sold under the coal company's trade name "Miral."

North American will produce its alum at a new $2 million plant located in Powhatan Point, Ohio, slated for start-up later this year. The production facility will incorporate an entirely new process, based on an alumina-bearing ore as a raw material. The ore is a by-product of the coal company's mining operations.

Alum manufactured from this alumina-bearing ore can be offered in purer form than that possible from conventional processes based on bauxite or clays, a North American spokesman says.

Montecatini in Fertilizer Deal With Holland's Delta Chemie

Montecatini, Italy's biggest chemical company, has made a fertilizer deal with Delta Chemie in Holland, a firm created by three large Dutch farm cooperatives.

Montecatini also discloses that its seven-month sales are 13 percent ahead of 1960 at $360 million, despite fiercer competition in domestic and export markets.

Under the Dutch agreement, Montecatini will participate in Delta Chemie's operations and, at the same time, Delta Chemie will take an interest in Cie Neerlandaise de l'Azote, SA, a Montecatini subsidiary in Holland also producing chemical fertilizers.

Gulf Fills Marketing Post

Cooke Bausman, jr., has been appointed manager of marketing for the petrochemicals department of Gulf Oil Corporation. Mr. Bausman, in this newly-created position, will direct Gulf's program for marketing of petrochemicals both in the US and abroad. His headquarters will be in the Gulf Building, Pittsburgh, Pa. Gulf's US petrochemicals sales headquarters will continue to be in New York.

HEADS CHEMICAL SALES: Theodore P. Malinowski, named to head the reorganized chemical sales activities of A. E. Staley Manufacturing Company, Decatur, Ill. He had been with Atlas Chemical Industries, Inc., Wilmington, Del.

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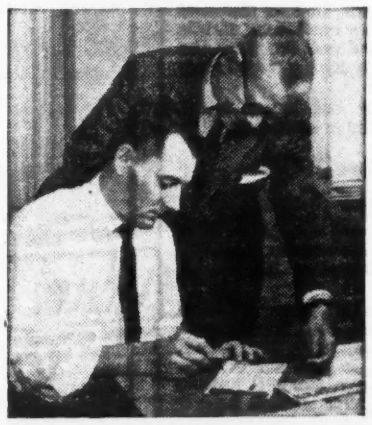

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Chemstrand, Yarn Maker, Buys Up Sweater Maker

Chemstrand Corporation, New York-based producer of "Acrilan" acrylic fiber and nylon yarns, has purchased an interest in Blume Knitwear, Inc., maker of sweaters and co-ordinates.

According to the fiber makers, the newly-acquired interest in "Helen Harper" provides Chemstrand with an opportunity to establish a framework within which to explore new technics and new products for the corporation in the sweater field. At the same time, it provides a means of setting new trends and styles by utilizing research and development results and coordinating efforts throughout the entire length of processing from raw material to finished consumer product, Chemstrand says.

GSA Seeks Authority To Sell Cobalt Compounds

General Services Administration asked congress just before adjournment last week for authority to dispose of 265,000 pounds of cobalt oxides and 5,500 pounds of cobalt carbonates now in the national stockpile.

The agency said that the Office of Civil and Defense Mobilization has determined that the material is excess to stockpile needs.

If approved by congress at a later date, GSA intends to offer the material for sale on a competitive basis.

Rexall Buys White Metal

Rexall Drug & Chemical Company has acquired White Metal Company for an undisclosed number of Rexall shares. White Metal produces collapsible metal tubes, slugs and aluminum cans at plants in Hoboken and Hawthorne, N.J., and Indianapolis, Ind. The acquisition, Rexall says, will complement its own container and packaging divisions.

Metal & Thermit's Sights

—Continued from page 7

million, equivalent to $1.16 per share. In 1960 Udylite sold a division of its company. Net sales and other revenue, apart from this division, approximated $37.5 million and net income for the year, before deducting loss arising from the sale of the division, was $1.47 per share.

Metal & Thermit increased its income 8.3 percent in 1960, despite a slight sales decline due to decreased volume in the detinning and welding divisions. Net sales for the year ending December 31, 1960, were over $40 million, with a net income of over $1.7 million. Earnings per common share were $2.10.

In 1946, Udylite entered the foreign market. Today, its Udylite products are sold in twenty foreign countries on six continents under exclusive licensing arrangements.

M&T has a broad international representation. In addition to its Canadian chemical and detinning manufacturing, it has manufacturing facilities in several foreign countries and also sells chemical products in some thirty major foreign markets.

Under the proposed terms, each share of Udylite stock would be exchanged for 0.65 shares of M&T's stock. M&T's present common stock will continue, share for share, as common stock of the combined enterprise.

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1—42" Sperry Filter 48-plates, 41-frames, hyd. closing, open del.
1—International Ball Mill, porcelain lined, 48" x 60", 15 H.P. Unibrake Motor.
1—Sparkler Filter 33-S-28, with Scavenger Plate, steam jacketed, like new.
2—J. H. Day Pony Mixers 00 & 15 gal.
1—Day #10 Cincinnatus Jktd. Sigma Mixer.
1—Patterson Steam Jkt. Ball Mill 42" x 36".
1—430 S.S. Tank 3000 gal. vert. ⅜ plate.
2—Vacuum Pumps, Gardner-Denver, 5" bore, 4" stroke, with 7½ H.P. motors.
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1—550 sq. ft. Buflovak monel single effect Evaporator.
1—300 sq. ft. Swenson 347 SS Single Effect Evaporator.
1—250 sq. ft. Buflovak 304 SS Single Effect Evaporator.
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1—4'6" x 46' 316 S.S. Clad Column, 250 PSI.
8—3'x20', 30"x19' 347 SS Packed Columns.
1—24" x 35' 304 S.S. Bubble Cap Column.

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78"x18'x¼"—316 Stainless Steel, 14 trays, 180 bubble caps per tray, 50 PSI.
72"x30'x⅛"—347 Stainless Steel, 21 trays, 38 bubble caps per tray.
48"x41'x5/16"—316 Stainless Steel, 40 trays. 70 bubble caps per tray, 100 PSI design.
36"x21'x¼" packed 316 ELC Stainless Steel, 15 PSI.
36"x20'x3/16" packed 316 Stainless Steel, 100 PSI.
30"x22'x¼" packed 316 Stainless Steel, 75 PSI.
14"x17'6"x⅛" packed 316 Stainless Steel.
12"x18'8"x3/16" packed 347 Stainless Steel, 100 PSI.
Pfaudler 20"x27', 16"x21', 16"x10' glass lined.

REACTORS
Pfaudler 500 & 300 gal. Type ELL glass lined, jacketed, agitated, 75 PSI.
Dopp 1700 and 1000 gal. Ni-resist, jacketed, Type "J" agitator, 150 PSI.
Patterson 500 gal. Steel, jacketed, agitated, 50 PSI.
Alloy Tank 750 gal. Type 316 Stainless Steel, 42 PSI.
Alloy Tank 300 gal. Type 316 Stainless Steel, 42 PSI.

COMPRESSORS — VACUUM PUMPS
Clark 9920 CFM 149 PSIA Suction, 239 PSIA Discharge.
Allis-Chalmers Centrif. 7500CFM @ 42.5PSI; 1250HP.
Worthington YO 1360 CFM @ 35 PSI; 150 HP.
Worthington 1015 CFM @ 35 PSI Steam Driven.
Norwalk Hydrogen Compressor 5 CFM @ 15000 PSI.
Nash L3 Stainless Compressor 127 CFM @ 20 PSI.
Nash CD 663 Stainless Compressor 50 CFM @ 75 PSI.
Nash #4 and TS10 Vacuum Pumps.
Stokes 612F Microvac 500 CFM Vacuum Pump.

CENTRIFUGES — FILTERS
Sharples C-27 Stainless Super-D-Hydrator.
Fletcher 40" Steel Suspended Perforated 15/7½ HP.
Rochester 30" Stainless Suspended imperforate basket.
Sharples #6 Super Centrifuge, Stainless bowl.
Oliver 5'3"x3' Stainless Precoat Rotary Vacuum Filter.
Goslin 36"x24" Stainless Rotary Vacuum Filter.

KILNS — DRYERS
Allis-Chalmers 8'x60'5/8" shell, Rotary Kiln, Falk reducer and motor.
Link Belt 7'x45'x½" shell Rotary Kiln.
Vulcan 6'x124'x¾" Rotary Kiln, reducer and motor.
Link Belt 604-24 Stainless Steel Roto-Louvre Dryer.
Link Belt 502-16 Roto-Louvre Dryer.
Rotary Dryer 4'x40'x⅜", reducer, motor, new shell.
Buflovak 6"x8" vacuum double drum Dryer.
Blaw-Knox 6'x5'6" vacuum single drum Dryer.
F. J. Stokes Model 38A Steam heated Dryer, 16 trays.

STAINLESS STEEL TANKS
108,000 gal. closed 316 Stainless 18'x61'x¼".
17,500 gal. closed 316 Stainless 15'x16'x⅜".
11,500 gal. closed 316 Stainless 12'x15'x3/16" Agit.
10,500 gal. closed 316 Stainless 10'x23'x3/16".
4,500 gal. closed 347 Stainless, heated, 6'x25'x¼".
4,000 gal. closed 304 Stainless, htd., 8'x12'x3/16".
3,500 gal. closed 304 Stainless 8'x9'x5/16".
1,200 gal. closed 347 Stainless clad 5'x8'x¼" Agit.
750 gal. closed 347 Stainless 5'x5'x3/16" Agit.
500 gal. closed 316 Stainless 4'x5'x3/16".
(20) 400 to 50 gal. Type 316 and 347 Stainless Tanks.
14—Aluminum Tanks 12,000, 10,000 and 7,000 gallon.
2500 gal. Pfaudler closed, glass lined, 78"x9'.

HEAT EXCHANGERS — CONDENSERS
2300 sq. ft. 564— 1"x16' Type 316 Stainless tubes.
1000 sq. ft. 370—¾"x14' Type 304 Stainless tubes.
800 sq. ft. 375—⅝"x14' Type 316 Stainless tubes.
615 sq. ft. 375—⅝"x10' Type 316 Stainless tubes.
420 sq. ft. 268—¾" x 8' Type 304 Stainless tubes.
306 sq. ft. 130—¾"x12' Type 316 Stainless tubes.
225 sq. ft. 96—¾"x12' Type 316 Stainless tubes.
188 sq. ft. 96—⅝"x12' Type 316 Stainless tubes.
146 sq. ft. 91—⅝"x8'6"Type 316 Stainless tubes.
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MISCELLANEOUS STOCK ITEMS
Swenson 435 sq. ft. Stainless Single Effect Evaporator.
Baker Perkins Stainless 300 gal. sigma blade Mixer.
Stokes RDS3 and DDS2 Rotary Tablet Presses.
Stokes #243E Oscillating Granulator 5 HP.
Symons 5½' short head hvy. duty Cone Crusher 200HP.
Raymond #50 and #51 Imp Mills.
Squire 40"x30" Pan Dryer, jacketed.
Buflovak jacketed 6' Vacuum Crystallizer with plows.
Rotex single deck Sifters 60"x84", 30"x96".
Sweco 48" Triple Deck Sifters, Model A9062.
Swenson 24"x20' Stainless Crystallizers, jacketed.
Triplex Pumps 2¼x4" 316 Stainless liquid end, 2000PSI.
Anders Air Dehydrator Model 8FA Automatic.
Kemp Absorptive Dryer, Model FE02-S Dual.
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Fork Lift Trucks 2000 & 6000 lbs., gas engine driven.
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2 Vilter 9½" x 9½" Ammonia Compressors with 100 HP motors.

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Unlined Steel Ball Mills:

(2) 3' x 5' (14) 5' x 7'
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19—Buffalo Model J Vacuum Chamber Dryers, 60" x 80" with 20 shelves.
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5—MIKRO Pulverizers Model #2 S 1.
2—Klus Fine Grind Pulverizers.
5—Raymond Model "OO" Screen Mills.
1—Raymond Whizzer Classifier.

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8295—Buflovak Stainless Steel Sanitary Thermo-Compression Evaporator with all accessories
8750—Zaremba Double Effect INCONEL Evaporator with calandria; 430 sq. ft. of surface; with accessories
8274—Swenson Quadruple Effect Long Tube Evaporator
8475—Zaremba Single Effect Cast Iron Evaporator; 130 sq. ft. Copper tubes
8695—Devine Single Effect Cast Iron Calandria type; 28"x8'
8870 M2—Mojonnier 3' Dia. S/S Calandria Evaporator; 30.5 sq. ft.
8020—Stainless Electrically Heated 60 Gal. Vacuum Evaporator; 20"x40" with Heat Exchanger
8598 D1—Copper Vacuum Pan 275 Gal.; 40"x72" overall; coil heated
487—Zahn & Nagel Continuous Evaporator; 2500 lbs. per hour, wiped surface, falling film.
3497 S7—Jacketed Crystallizers; 24"x12'
8411 C15-20—Five Baker Perkins Stainless Steel Jacketed Kettles 540 Gal. 4'x5'5" with agitators; Bolted Manhole Covers
3994 K4—Stainless Vacuum Still; Coil Htd. 755 Gal. 4'6"x6'; with Column
4840 B36—Electrically Heated 800 Gal. Stainless Steel Kettle 60"x60"
4840 B39—1200 Gal. Steel Kettle, Electrically Heated; 74"x68"
4840 B37—Stainless Vertical Kettle 5'x8'9", 1300 Gal. set in a cooling Jacket
8529 Y1-2—Two Pfaudler Stainless Steel Jacketed 1500 Gal. Vessels, 5'x10'
8048 D1-2—Struthers Wells Type 316 Stainless Vertical Mixing Kettles, 2000 Gal. 6'x10' Jktd. and Agitated
8291 A6—Stainless Steel 2000 Gal. Jacketed Kettle; 64"x10'8"
4803 S2—Pfaudler Glass Lined Jacket Evaporating Dish 28"x10"
4913 G5—Pfaudler Glass Lined Jktd. Evaporating Dish 46"x16" with Glass Lined Agitator; XPL motor
4955 M29-31—Pfaudler Glass Lined Evaporating Dishes: 32"x20"; 40"x26"
4955 M4—Pfaudler Glass Lined 150 Gal. Evaporating Dish; 5'x24"

REACTORS

4851 S5—1000 Gal. Steel Pressure vessel 52"x 67½", Jktd. Agitated Dished Heads
8440 T103—Five Steel Jacketed and Agitated 500 Gal. Reactors
4483 G16—500 Gal. Jacketed Agitated Steel Reactor 4'x4'; Bolted Cover
4339 C18—Pfaudler Glass Lined 1000 Gal. Jacketed Reactor
3673 L9—Pfaudler Glass Lined Jktd. Reactor; 16"x28"
4921 A50-51-52—Three Jacketed Steel Reactors 80 Gal. 28"x30" with Agitators; Dished Heads
3944 B2—Steel Jacketed and Agitated Reactor; 315 Gal.; 44"x48"
4913 G18—DOPP Cast Iron Jacketed Reactor 30 gal. 36"x20" with bolted head and agitator
3168 D7—Doppioy Jacketed Reactor; 40" Dia.; 80 Gal.
4954 T5—Patterson-Kelley Stainless Steel Percolator or Extractor 200 Gal. 28"x76"; ASME coded
5243—Struthers-Wells Stainless Steel Reactor Jacketed 400 Gal.—Agitated 7½ HP
5284—Patterson Foundry STAINLESS Reactor; 400 Gal. Jacketed 30#; 30# Int. ASME; Agitated
5251 P1-14—Fourteen Stainless Steel 500 Gal. Reactors; 5'x5'; Bolted Heads; Manholes; Agitators

CENTRIFUGALS

4041 P14—Rubber Cov. Susp. Centrif.; 30"x18"; Annular Discharge
4330 W2—Tolhurst 26" Centrifugal; Perf. Basket; Plow Dis. 2 speed
4913 G17—Tolhurst 26" Rubber Covered Suspended Centrifuge; perforated basket; bottom dump and plow
1152 Mc—Bird 48" Rubber Cov. Extractor; with 40 HP 2 speed motor
1152—Mci—Bird 12" Rubber Lined Centrifuge with Perforate and Imperforate Basket
4262 H4—Laundry Type 28" Centrifuge; Copper Perf. Basket; underdriven
4926—Squier 30" Suspended Stainless Steel Centrifugal with perforate basket
5190 D4—A. T. & M. 30" Susp. Centrifuge in Stainless; 2 speed
4093 B11—A. T. & M. Susp. Centrifugal; 40"x24"; Solid Bowl; Bot. Discharge
C5-191—Tolhurst 26" Suspended with Plow and Scraper; two speed motor
4819 M9—A. T. & M. 30" Solid Basket Susp. Centrifuge extra rubber covered curb & Basket
5230 L1—Western States Model UD Centrifugal in Type 316 Stainless; 36"x20"; Vapor Tite; Automatic Loading
2945 M4—Tolhurst 40" Overdriven; self balancing with Copper Basket, perforated; 7½" HP motor

MIXERS

5523—Baker Perkins Lab. Size Stainless Steel Jktd. Double Sigma Mixer; 2 Gal. 11½"x6½" x9½"
5454 G2—Baker Perkins Stainless Steel Lab. Double Sigma Arm Mixer 2¼ Gal.; 6½"x9½" x11½"
5520 D1—Baker Perkins 2 Gal. Double Arm Jktd. Mixer; 2 HP
5325—Baker Perkins Lab. Jktd. Dispersion Mixer UNE 7; 5 Gal. Pressure Cover, Screw Tilt; 30 HP
5250—Reado Jktd. Steel Dbl. Arm Mixer; 15 Gal.; 15 HP
5383—Baker Perkins Stainless Double Arm Mixer 15 Gal. Jacketed Vacuum Cover; 15 HP
5482—J. H. Day Double Sigma Arm Jacketed Mixer; 18"x18"x20"; 3 HP
M25 401—Baker Perkins Stainless Steel Unjacketed Mixer; S.S. 33"x32"x36"; 20 HP motor
5525 C1—Baker Perkins Stainless Lined Size 14—50 Gal. Double Arm Jacketed Mixer; Vacuum Cover; 15 HP
5426—Baker Perkins Size 14—50 Gal. Double Sigma Arm Mixer Jacketed: 28"x29"x23"; 7½ HP motor
5520 D2—Baker Perkins 50 Gal. Double Arm Jacketed Mixer; 30 HP
5481 M3—J. H. Day Cincinnatus 75 Gal. Jacketed Double Arm Mixer; 10 HP
2160—W. & P. Type Jacketed Double Arm 100 Gal. Mixers geared both ends
5316—Baker Perkins 100 Gal. Double Arm Jacketed Mixer; geared both ends; power screw tilt; motorized
5221 C-3-4—Two Lehmann Amalgamators; Stainless lined; 32"x44"x36"; Stainless Arm; 7½ HP
5401—Werner & Pfleiderer 150 Gal. Double Arm Jacketed Mixer
5481 M1-2—Two Day Cincinnatus 200 Gal. Jacketed Double Arm Mixers with Covers good for Internal Pressure; 20 HP
5502—Baker Perkins 200 Gal. Jacketed Double Arm Mixer; 50 HP
4742—Baker Perkins Size 16 UUMM Double Arm Dispersion Type Mixer 240 Gal. holding; 150 Gal. working; Compression Cover for 100 HP
4271 D1—Baker Perkins Size 17 Class BB Type VII Jacketed Mixers; double sigma arms; 200 Gal.
M25-501—J. H. Day Stainless 250 Gal. Jacketed Mixer with Sigma arms; geared both ends
4409 D—8 Baker Perkins Heavy Duty Jacketed Mixers; 300 Gal. working: Size 18 with Hydraulic Tilt

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3—20,000 gal. vert. T316LC SS crystallizing tanks, 14'x15' cone bottom, cone top, 3/8".
6—13,300 gal. vert., T321 SS, 11'10"x15'x7".
1—12,000 horiz., T304 SS, 9'6"x20', dished, UNUSED.
2—5700 gal. horiz. T304 SS, 6'4"x24', cone heads—UNUSED.
2—4500 gal. vert., T304 SS, 8'x12', cone bott.—UNUSED.
18—3650 gal. vert., 10'x7', open top, 3/16".
1—3400 gal. horiz., T304 SS, 6'6"x16', dished.
1—3350 gal. vert., T304 SS, 8'x8'6", dished, 50 psi WP, w/Agit.
1—3300 gal. vert., T304 SS, 6'x14'6", dished.
1—3250 gal. vert., T316LC SS, 6'x15'10".
1—3200 gal. vert., T304 SS, 6'6"x12', dished.
2—3000 gal. vert., T304 SS, 6'x15', dished.
3—3000 gal. horiz., sanitary milk tanks.
3—3000 gal. vert., T347 SS, 5'x19', ASME 60 psi.
2—2600 gal. vert., T316 SS, 7'x8', dished, coils.
1—2350 gal. vert., T304SS, 5'x16', 3/16", coils.
1—2250 gal. vert., T316LC SS, 6'x8', flat heads, 3/16".
1—2100 gal. vert., T316 SS, 7'x6'3", dished.
5—2100 gal. vert., T304 SS, 8'x5'6", dished.
1—2100 gal. vert., T316 SS, 6'x9'10".
1—2000 gal. vert., T304 SS, 8'x5', cone.
1—2000 gal. horiz., T304 SS, oval.
1—1650 gal. vert., T304, 5'x11', dished.
60—1350 gal. horiz., T347 SS, 4'x14', coils, dished, ASME, 60 psi WP.
1—1300 gal. vert., T304 SS, 6'x6', dished.
9—1300 gal. vert., T321 SS, 7'x4'6".
1—1200 gal., vert., T304 SS, 4'x12'6", dished.
3—1100 gal. vert., T347 SS, 4'x11', 60 psi.
2—1000 gal. vert., T304 SS, 4'6"x8'6".
4—1000 gal. vert., T304 SS, 6'x5'.
1—90 gal. vert., T304 SS, 6'x4', dished.
3—850 gal. vert., T304 SS, 4'x9', dished.
1—800 gal. vert., T304 SS, 5'x5'6", dished.
3—750 gal. vert., T304 SS, 5'x5', dished.
6—685 gal. vert., T316 SS, 3'x13', coils.
1—600 gal. vert., T316 SS, 5'x4', dished.
1—575 gal. vert., T304 SS, 5'x5'.
27—476 gal. vert., 4'6"x4', open.
54—475 gal. vert., 6'x12', open.
1—375 gal. vert., T316 SS, 4'x4'.
3—300 gal. vert., T347 SS, 4'x3', dished.
100—TANKS, 285 to 14 gal., all sizes, types, etc.

DRYERS — KILNS

5—F. J. Stokes #138J-16 Vacuum Shelf Dryers, 195 sq. ft., 16 shelves.
1—Buflovak 98 sq. ft. Vac. Shelf dryer.
2—Buflovak 42"x120" Dbl. drum dryers, ASME 160 psi drums, 1950.
1—American 42"x120" Dbl. drum dryer, all stainless access., 100 psi.
1—Buflovak 32"x52" Dbl. drum dryer.
1—American 36"x84" Dbl. drum dryer, in vacuum chamber, ASME.
1—Buflovak 6"x8" Dbl. drum dryer, Vac.
1—Buflovak 5'x12' single drum VACUUM dryer—UNUSED.
1—Vulcan 10'x11'x175' long rotary kiln, 2-tires, 13/16" shell.
3—10'x100' rot. dryers, 5/8" welded.
1—Link-Belt #900-30 Roto-Louvre dryer.
2—Bartlett & Snow 8'x6"x70' rotary dryers, 5/8" welded, 1952, w/fans, etc.
1—Davenport 8'x60' rot. dryer, 7/16" welded.
1—Allis-Chalmers 7'x120' kiln, 5/8".
1—6'x150' rotary kiln, 5/8" welded.
1—Link-Belt #604-18 Roto-Louvre dryer.
1—Louisville 5'x30' steam-tube dryer.
2—Louisville 4'x6"x25' steam-tube dryers.
1—Standard Steel 3'x23' rot. dryer.
1—3'x15' Everdur shell dryer.
1—12"x8' Stainless rot. dryer.

AUTOCLAVES — KETTLES — REACTORS

1—2000 gal. Glascote blue G/L reactor, jacketed, ASME vacuum int., 95 psi jkt.
65—1400 gal. Pfaudler blue G/L jacketed kettles, Stainless cover, 3 HP Agit., baffle.
4—1350 gal. T347 SS jkt. kettles, Agit.
14—1250 gal. Pfaudler blue G/L jacketed closed reactors, Agit. vacuum, w/cond.
1—1000 gal. Dopp Cast Iron Kettle, 125 psi jacket, 25 HP anchor Agit.
1—1000 gal. T316 SS jkt. reactor, ASME, UNUSED.
2—1000 gal. Patterson steel dissolvers, jkt. & Agit.
4—800 gal. Struthers-Wells T316ELC SS clad autoclaves, 3'-6"x10', horiz., ASME 400 psi WP, w/(3) vert. titanium Agit.
1—750 gal. T304 SS jkt. reactor, Agit.
1—600 gal. Stainless jacketed evaporating & crystallizing kettle, Agit.
54—600 gal. Pfaudler Stainless Steel jacketed kettles, open.
2—500 gal. T304 SS jkt. reactors, ASME, Vacuum, UNUSED.
6—465 gal. T304L SS jacketed recators, 150 psi internal, 165 psi jkt.
1—300 gal. Pfaudler blue G/L reactor, jkt., Agit., ASME.
1—300 gal. Clascote blue G/L reactor, jkt., Agit., ASME.
1—300 gal. T304 SS jacketed reactor, ASME, UNUSED.
72—250 gal. Pfaudler blue G/L kettles, jkt.
1—200 gal. Readco jkt., T304 SS, Dbl. Motion Agit.
1—175 gal. horiz. Titanium autoclave, 2'x7', 1000 psi, w/(3) vert. Agit.
1—175 gal. T304 SS jkt. reactor, Agit.
2—125 gal. T316 SS jkt. fermenter kettles.
1—30 gal. Pfaudler blue G/L jkt. reactor.

MIXERS — MILLS

40—Baker Perkins #17, 200 gal. jacketed double-arm mixers.
1—Baker Perkins #15-UUMM, 100 gal. dispersion-blade jkt. mixer, 100 HP.
1—Baker Perkins #15, 100 gal. sigma-blade jkt. mixer, T347 SS.
1—Day 100 gal. sigma mixer, T304 SS.
2—J. H. Day #5, 75 gal. sigma mixers.
1—Sturtevant #7, 75 cu. ft. T304 SS blender.
1—Worthington 75 cu. ft. rotary blender.
1—Raymond 66", 6-roller hi-side mill.
1—Raymond 50", 5-roller hi-side mill.
1—Hardinge 8'x48" conical pebble mill.
2—Hardinge 7'x36" conical pebble mills.
1—Allis-Chalmers 6'x12' rod mill, 125 HP.
1—Bonnot 5'x10' ball-rod mill, 75 HP.
3—Allis-Chalmers 5'x22', ball-tube mills.
12—Abbe Eng. 6'x8' batch pebble mills.
2—Patterson 8'x10' batch pebble mills.
1—Mikros #2TH pulv., stirrup hammers.
3—Fitz. SS mills: #D, F, K-8.

AT LITTLE ROCK, ARK.

150—Worthington Worthite cent. pumps: 4"x3", 3"x2", 2"x1-1/2", etc. W/motors.
60—LaBour 2" self-priming stainless centrif. pumps, w/motors.
60,000'—Stainless Steel pipe, sch. 10 & 40, 1", 2", 3", 4", 6", etc.
10,000'—Stainless Steel vapor pipe; 6", 12", 16" & 20" dia.
10,000—Stainless Steel flanged valves: gate, globe, check—all sizes & Mfrs.

COLUMNS—HEAT EXCHANGERS EVAPORATORS—BOILERS

2—Vulcan T316SS 10 plate bubble-cap columns: 110", 60" dia.
1—36" dia. x 6 plate T316SS column.
6—30" dia. x 19' T347SS packed columns.
8—24" x 16' Duriron cast packed columns.
1—24" x 33' Duriron SS packed column.
20—Copper bubble-cap columns: 20" to 54" d.
1—1960 sq. ft. T316 SS exchanger, ASME.
2—1450 sq. ft. T316 SS condensers.
6—1450 sq. ft. Stainless gas heat exchangers.
3—1000 sq. ft. Duriron pipe coolers.
1—900 sq. ft. T304 SS horiz. exchanger.
2—800, 730 sq. ft. T316 SS heat exchangers.
6—691 sq. ft. copper Dbl.-pipe coolers.
8—400 sq. ft. T304 SS pipe coolers.
12—Amer. Heat Reclaiming T316L SS spiral heat exchangers: 162, 73 sq. ft.
15—75 sq. ft. nickel 2" IPS pipe coils.
20—T316 SS condensers & heat exchangers: 510, 427, 410, 400, 390, 290, 277, 264, 250, 50, 47 sq. ft.
20—Duriron pipe coolers, 10 to 170 sq. ft.
7—4000 sq. ft. single-effect calandria evap., copper tubes, C.I. bodies.
1—1250 sq. ft. Mojonnier Stainless evap.
1—1060 sq. ft. Gen. Amer. T316 ELC forced circulation evaporator, 1953, w/pumps, piping, etc.
3—Buflovak double-effect Stainless Vert. long-tube type evaporators: 840, 710, 588 sq. ft.
1—630 sq. ft. Struthers-Wells T316 SS calandria type evap.
1—370 sq. ft. Henzey Stainless evap.
1—320 sq. ft. Steel reboiler evap.
1—250 sq. ft. Buflovak T304 SS evap., forced circulation, recompression.
1—118 sq. ft. F. J. Stokes T316 SS still.
5—Comb. Eng. 435 HP boilers, 300 psi.
3—Edgemoor waste-heat boilers, 250 psi.
2—Keeler 200 HP coal-fired boilers.

CENTRIFUGALS — FILTERS

1—Bird 18"x28", T304 SS, conical bowl.
3—Bird 24"x24", type CH, monel.
1—Bird 24"x38", steel cylin. bowl.
7—Sharples #C-20, #C-27 Super-D-Hydrators, T316 SS, w/timers.
1—Sharples 16-P centrif., T304 SS, pressure-tite.
25—Sharples #AS-16V super centrifugals, Inconel, sludge disch., vapor-tite.
2—Sharples 18V, tined steel vapor-tite.
1—Tolhurst 48" susp., T304 SS perf.
4—A.T.&M. 40" susp., T304 SS perf. & solid.
1—A.T.&M. 40" susp., T316 SS, perf., 30/5 HP.
1—A.T.&M. 32" susp., T304 SS, perf.
1—A.T.&M. 12" susp., T304 SS perf.
5—Shriver 48" cast iron P. & F. filter presses, 50 chambers, Hyd. closure, 1000 sq. ft.
3—Valley 36" Alum. P. & F. filter presses, 65 chambers, Hyd. closure.
1—Sparkler 88 sq. ft. T305 SS filter, #RSC, horiz. tank, vert. leaf.
1—Niagara 64 sq. ft., T304 SS filter, #33D12, horiz. plates, jacketed.
1—Niagara 22 sq. ft. T304 SS, horiz. plate filter, 33-4-D, Jacketed, 1959.
2—Oliver 5'3"x3' rot. vac. filters, T316 SS.
6—Davenport dewatering presses: #1A, 2A, 3A.
2—Niagara #36H-350-2, T316 SS filters, horiz. tank, vert. leaf, 350 sq. ft., jacketed.
1—Niagara 510 sq. ft. T316SS vert. leaf.
1—Niagara 54 sq. ft. T304SS vert. leaf.

SEND FOR DETAILED CIRCULARS AND INFORMATION

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EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

1—Pfaudler Series R 1500 gal. monel jacketed reactor, complete with agitator and drive.

1—Alloy Fabricators type 316 SS reactor, 4000 gal.

1—Dover type 316 SS jacketed reactor, 4000 gal.

1—Stainless steel jacketed reactor, 2000 gal.

1—Patterson-Kelley type 316 SS jacketed reactor, 1000 gal.

3—Whitlock type 316 SS jacketed reactors, 600 gal.

1—Stainless steel jacketed reactor, 500 gal.

1—Pfaudler type 316 SS 300 gal. jacketed reactor, complete with impeller type agitator and drive, NEW.

1—Walter 300 gal. Hastelloy "B" jacketed kettle.

2—Whitlock type 316 SS 300 gal. receivers.

1—Struthers Wells Hastelloy "B" 300 gal. vacuum receivers.

1—Blaw-Knox stainless steel 300 gal. vacuum receiver.

8—Blaw-Knox type 347 SS vacuum receivers, 100 and 200 gal.

2—Pfaudler Series R 5000 gal. glass lined reactors, complete with agitators and drives, NEW.

2—Pfaudler Series R 3000 gal. glass lined jacketed reactors, complete with agitators and drives.

1—Pfaudler Series R 1500 gal. glass lined reactor, complete with agitator and drive.

1—Glascote Model HR 1000 gal. glass lined jacketed reactor, complete with impeller type agitator and drive.

1—Pfaudler Series EL 750 gal. glass lined jacketed reactor.

1—Pfaudler Series EL 500 gal. glass lined jacketed reactor, complete with agitator and drive.

1—Vulcan Carpenter 20 SS heat exchanger, 600 sq .ft.

3—Badger type 316 SS heat exchangers, 630 sq. ft., 500 sq. ft. and 450 sq. ft.

3—Patterson-Kelley type 316 SS condensers, 300 and 200 sq. ft.

1—Struthers Wells stainless steel 1150 sq. ft. long tube evaporator.

1—Sparkler Hastelloy "B" Model 18D12 jacketed filter.

1—Gemco SS jacketed double cone vacuum blender, 90 cu. ft.

1—J. P. Devine SS jacketed double cone vacuum blender, 30 cu. ft.

1—Shriver SS 24" x 24", 4 eye closed delivery, washing type press, 18 chambers.

1—Sturtevant #7 dustite rotary batch blender, NEW.

1—Young SS double ribbon blender, 4 cu. ft.

10—Robinson SS 250 cu. ft. double ribbon blenders.

3—Robinson SS 125 cu. ft. double ribbon blenders.

1—Baker Perkins 10 gal. SS double arm jacketed mixer.

1—J. H. Day SS 5 gal. vacuum jacketed sigma blade mixer.

1—Baker Perkins SS 100 gal. jacketed double arm mixer.

4—Sharples type 316 SS Nozljectors with 40 HP explosion proof motors.

1—Tolhurst 48" Batch-O-Matic Centrifuge, SS, NEW.

1—Bird SS 40" suspended type centrifuge, complete with perforate basket, motor and plow.

1—AT&M 26" type 316 SS suspended type centrifuge, complete.

4—Tolhurst 40" center slung rubber covered centrifuges with perforate baskets.

2—Fletcher 48" whirlwind rubber-covered centrifuges with perforate baskets.

1—Struthers Wells SS rotary dryer, 5' x 25'.

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EXCELLENT CONDITION

LOWEST PRICE

SHREDDERS/MIXERS — Baker Perkins Sigma Blades, Double Screw Tilt M/D 320 Gal. Cap. Brine Jacketed.

PRESSES:—Shriver, Closed Del'vy—All Cast Iron, Pyramid Design Plates 30"—24" & 12" sizes with any desired amount of plates & frames. 12" size has S.S. Screens.

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Column: 24" x 22', 316 stain. steel.
Mill: 3-roll Day HiSpeed 14x30".
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100 cu. ft. Jktd Ribbon Mixer—25 HP
Stokes DD2 & RDS3 rotary Tablet Presses
Hormann 10"x10" Stainless Filter Press
Day "Roball" 20"x48" single deck Sifter
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2—Simpson intensive mixers size #2 type UD, jacketed 6' pans.

8—Vertical closed rubber lined tanks, 6000 and 12,000 gallons capacity.

2—Devine #28 double door vacuum shelf dryers 59" x 78".

3—Hersey rotary dryers 6' x 23', 4' x 22', 1½' x 16'.

3—Sparkler model 33-S-17 rubber lined filters.

2—J. H. Day gearless pony mixers, model 4-B 125 gallons, 4-A 100 gallons.

2—Procter & Schwartz steam heated tray ovens 45" wide x 10'3" long x 8'10" high.

1—Patterson Kelley twin shell blender, 40 cu. ft.

1—Readco 25 cu. ft. double spiral ribbon blender.

3—Mikro pulverizers 3-TH, 2-TH, 1-SH.

4—80 gallon type 347 stainless steel autoclaves, 500 PSI.

1—Stainless steel 400 gallon jacketed and agitated reactor.

Write or Phone Your Inquiries

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Eimco Lab Drum Filter 18" dia. x 12" drum, cabinet unit with all accessories, Type 316 SS, vapor tight hood, explosion proof motors and starter station. Box 580, Gramercy, Louisiana.

For Sale: 2' x 6' Stokes jacketed stainless Rotary Vacuum Dryer; three Buflovac stainless Double Effect Evaporators 608-708-840 sq. ft.; (2) 2300 gal. Vertical stainless tanks; Best Equipment Co., 1737 W. Howard St., Chicago 26, Illinois.

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7—Baker Perkins 100 gal., 2 arm sigma—jacketed roller bearings—hyd. tilt.

1—Readco—1 gal. S.S. jacketed, double sigma.

1—Baker Perkins—2½ gal. S.S. jacketed—2 arm naben.

1—Day Imperial—150 gal. screw tilt—double sigma.

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Pharmaceutical Chemical Sales: Long established, New York City based, chemical sales company has opening for a young man for inside and outside sales work on pharmaceutical bulk chemicals. Excellent opportunity for man with initiative and imagination. Must have chemical degree or equivalent and have completed military service. Straight salary commensurate capability, experience and subsequent performance. Give resume with full background, training, salary. OPD 279.

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	Number of Tanks	Capacity Bbls.
"A.O. Smith" one piece glass lined storage tanks	6 Hor.	1205
	10 Hor.	291
	8 Hor.	333
	3 Ver.	172
(Govt. Cellar)	9 Ver.	193
"Pfaudler" one piece glass lined storage tanks	4 Ver.	229
	2 Ver.	136
"Pfaudler" sectional glass lined storage tanks	36 Ver.	196
Mammut lined closed fermenter	1 Ver.	255
	1 Ver.	234

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Successor to F. W. Berk & Company, Inc.

Current Market Quotations

—Continued from page 27

Vitamin B_{12}, 0.1% trituration of cyanocobalmin, USP, with dicalcium phosphate or mannitol . gm 52.00 - —
USP solution of cyanocobalamin (5,000 micrograms per cc.), 5-gram bots gram 52.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin 500-gram bots., 1-5 kilo dms. frt. alld gram. .57 - —
Vitamin B_{12}, 0.1% cobalamin concentrate in gelatin, 1-10 kilo. dms., frt. alld gram. .57 - —
Vitamin C (see Ascorbic acid).
Vitamin D, (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots kilo 42.50 - —
850,000 units per gram less than kilo lots kilo 45.00 —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin K_1, 25-gram lots . . . . gram. 4.50 - —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P petroleum).

W

Wahoo root bark, bls . . . . . lb. 2.10 - —
Warfarin, 0.5%, dms. 50-lb. lots, dlvd lb. 1.95 - —
dms. 25-49-lb. lots, New York or Chicago lb 2.05 - —
dms. 5-24-lb lots, New York or Chicago lb 2.15 - —
Watchung-type reds., bbls lb. 1.95 - —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal. 12.25 - —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb .21 - .22
White precipitate, USP, powd., dms., 100 lbs. f.o.b. works lb 5.50 - —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb. .22 - —
Wintergreen oil, USP nat northern, cns lb. 6.35 - 17.50
USP, nat. southern cns lb 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls . . . . . lb. .20 - .25
Witch hazel leaves, bls. lb. .35 - .40
Wollastonite, fine paint grade, bgs., c.l., works ton 41.00 - —
bgs., l.c.l., ex whse . . . . ton 51.00 - —
medium paint grade, bgs., c.l., works ton 29.00 - —
bgs., l.c.l., ex whse. . . . . ton 39.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs . . . . . lb 2.50 - —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns . . . . . lb. 4.75 - —

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. . . . . gal. .29 - —
Birmingham dist. . . . . gal. .29 - —
Chicago dist. . . . . gal. .28½ - —
Cleveland dist. . . . . gal. .29 - —
Geneva, Utah . . . . . gal. .29 - —
Johnstown, Pa. . . . . gal. .29 - —
Lackawanna, N.Y. . . . . gal. .29½ - —
Lone Star, Tex. . . . . gal. .27 - —
Lorain, Ohio . . . . . gal. .29 - —
Middletown, Ohio . . . . . gal. .30 - —
Minnequa, Col. . . . . gal. .29 - —
Philadelphia dist. . . . . gal. .29 - —
Pittsburgh dist. . . . . gal. .29 - —
Sparrows Point, Md. . . gal. .29 - —
Terre Haute, Ind. . . . . gal .29 - —
Youngstown, Ohio . . . . gal. .29 - —
Xylene, petroleum, indust., tanks, f.o.b. works:
Bayonne, N. J . . . . . gal. .29 - —
Baytown, Tex. . . . . gal. .27 - —
Charleston, S. C. . . . . gal. .29 - —
Chicago, Ill . . . . . gal. .28½ - —
Detroit, Mich., dlvd . . . gal. .27½ - .29
Houston, Tex. . . . . gal. .27 - —
Philadelphia, Pa. . . . . gal. .29 - —
Providence, R. I. . . . . gal. .30 - —
Sewell's Point, Va. . . . . gal. .28 - —
Wood River, Ill . . . . . gal. .28½ - —
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif lb. .21 - —
dms., l.c.l., f.o.b., Richmond, Calif lb. .22 - —
tanks, frt. alld. . . . . lb. .19 - —
o-Xylene, dms., c.l., works . . . . . lb. .08 - —
dms., l.c.l., works . . . . . lb. .09 - —
tanks, works . . . . . lb. .06 - .08½
p-Xylene, dms., c.l., works . . . . . lb. .20 - —
dms., l.c.l., works . . . . . lb. .21 - —
tanks, frt. alld . . . . . lb. .16 45 - —
Xylenol, cryst., 45°-47°C., m.p., dms., l.c.l., works, frt. equald lb. .23 - —
56°-58°C., m.p., dms., l.c.l., works, frt. equald lb. .33 - —
60°-62°C., m.p., dms., l.c.l., same basis lb. .40 - —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis gal. 1.25 - —
dms., l.c.l., same basis gal. 1.30 - —
tanks, same basis gal. 1.05 - —
b.r. 7°-9° C., dry at or below 227° C., dms. c.l., same basis. gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
2,4-Xylidine, tech., dms., frt. alld. lb. 1.15 - —
2,5-Xylidine, tech., dms., frt. alld. lb. 1.20 - —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb. .39 - —
dms., l.c.l. same basis . . . lb .40 - —
tanks, same basis . . . . . lb. .38 - —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. . . . . lb 2.15 3.05
Yeast, brewers, debittered, USP XV, Saccharomyces dlvd lb. .27 - —
Yeast, primary, USP XV, 150 meg. B, per gram, 100-lb. dms lb. .47 - —
USP XV, 270 meg. B, per gram, 100-lb. dms lb. .52 - —
primary, USP, XV, 300 meg., B, per gram, 100-lb. dms lb. .56 - —
Yeast, primary, USP XV, 900 meg. B_1 per gram, 199-lb. dms. lb. .60 - —
Torula, USP, dlvd. . . . . lb. .18 - —

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls. . . . . lb. .40 .45
Ylang Ylang oil, Bourbon, bots. . lb. 7.00 - 22.00
extra, bots . lb. 24.00 - 33.00
Yohimbine hydrochloride, bots., tins. oz. 3.75 - 4.25

Z

Zein, 50-lb. bgs., c.l., t.l., f.o.b. works lb. .37 - —
50-lb. bgs., smaller lots, f.o.b. works lb. .41 - .44
Zinc acetate, NF, VIII, dms lb. .53 —
Tech., dms., l.t.l., works lb. .2950- —
Zinc borate bgs., 1,000 lbs or more, works lb. .23 - —
bgs. less than 1,000 lbs., same basis lb. .27 - —
Zinc chloride, NF, gran., dms lb. .42 - —
NF, precip., powd., dms lb. .26 - —
Tech. soln. 50%, dms., c.l., works 100 lbs. 5.80 - —
dms., l.c.l., works 100 lbs. 6.40 - —
tanks, works 100 lbs. 5.15 - —
fused dms. c.l. works 100 lbs. 10.70 - —
dms. l.c.l. works 100 lbs. 11.20 - —
Tech. gran., fib. dms., c.l., work . . 100 lbs. 11.45 - —
fib dms. l.c.l. works 100 lbs. 11.95 - —
Zinc chromate bbls., dlvd. lb. .29 - —
Basic bbls. dlvd . . . . . lb. .34 - —
Zinc cyanide dms., 1,000-lb. lots or more, works lb. .53 - —
dms. smaller lots, works lb. .57 - —
Zinc dust coml. bbls., c.l. works. lb. .16 - —
Pigment, bbls., c.l., works . . . lb. .15½ - —
bbls., l.c.l., works . . . . . lb. .17¼ - —
Zinc fluoride, bbls., works . . . . . lb. .49 - .50
Zinc hydrosulfite, dms., c.l., frt. alld lb. .21½ - —
dms. l.c.l. frt. alld. lb. .23½ - —
Zinc metal, prime western, slabs, E. St. Louis lb. .11½ - —
Prime western slabs, New York. lb. .12 - —
Zinc naphthenate liq 8% Zn., dms., frt. alld lb. .27 - —
10% Zn., dms., frt. alld lb. .33 - —
Zinc nitrate, tech., flake, 100-lb. fib. dms., l.c.l. . . . . lb. .16½ - —
300-lb. fib. dms. l.c.l. . . . . lb. .14½ - —
300-lb. fib. dms. c.l. lb. .14 - —
Zinc oxide pigment, American process, lead-free bgs., c.l., f.o.b. works lb. .12½ - —
bgs., l.c.l., 10 tons or more, same basis lb. .13 - —
bgs., l.c.l., smaller lots, same basis lb. .13½ - —
Zinc oxide, leaded, 35%, bgs., c.l., mills, f.o.b. works lb. .14 - —
bgs., l.c.l., 10 tons or more, same basis lb. .14½ - —
pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis. lb. .14½ - —
Zinc oxide, pigment, French process, green seal, bgs., c.l., f.o.b. works lb. .14½ - —
bgs. l.c.l. 10 tons or more, same basis lb. .15 - —
Zinc oxide, French process, green seal bgs. l.c.l. smaller lots, same basis lb. .14½ - —
red seal, bgs., c.l., same basis, lb. .14 - —
Zinc oxide, French process, white seal, bgs., l.c.l., 10 tons or more, same basis lb. .15 - —
bgs. l.c.l. smaller lots same basis lb. .15½ - —
same basis lb. .15¾ - —
Zinc oxide, white seal, bgs., c.l., same basis lb. .14¾ - —
bgs. l.c.l. 10 tons or more, same basis lb. .15½ - —
bgs l.c.l. smaller lots, same basis lb. .15¾ - —
Zinc oxide, USP, 50 lb.-dms., c.l., frt. alld. lb. .15¾ - —
50 lb.-dms., l.c.l., 10 tons or more, same basis lb. .16½ - —
50 lb.-dms., l.c.l., smaller lots, same basis lb. .16¾ - —
Zinc phenolsulfonate NF, gran., dms lb. .45 - .46
NF powd. dms lb. .48 - .49
Zinc resinate precip 7.2-7.6% Zn., dms., frt. alld lb. .45 - —
Zinc silicofluoride dms works lb. 12½ .14
Zinc stearate USP, ctns., c.l. lb. .41 - —
lb. .41 - —
ctns. l.c.l lb. .42 - .46
Zinc sulfate, powd., monohydrate, 36% Zn, bgs. c.l. dlvd.E. 100 lbs. 8.00 - —
bgs., l.c.l., dlvd. E 100 lbs. 9.00 - —
Zinc sulfate in bbls 40c higher.
Zinc undecylenate 75-lb. fib. dms., f.o.b. works lb 2.04 - —
Zinc, yellow (see Zinc chromate)
Zinc-ammonium chloride, bgs., c.l., works 100 lbs. 10.25 - —
bbls., c.l., works . . . 100 lbs. 10.85 - —
bbls. l.c.l. works 100 lbs. 11.35 - —
Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt. alld lb. .26 - —
Normal, 250-lb dms., frt. alld lb. .55 - —
bgs., 5 tons to c.l., works lb. .03½ - —
Zircon (G) gran., bgs., 5 tons to c.l., works lb. .03½ - —
bgs., 1 ton to 9,999-lb. lots, works lb. .04 - —
bgs., smaller lots, works lb. .06½ - —
Zircon (G) milled bgs. c.l., works. lb. .04½ - —
bgs., 5 tons to c.l., works lb. .04¾ - —
bgs., 1 ton to 9,999-lb. lots, works lb. .04¾ - —
bgs., 500-1,999-lb. lots, works lb. .07½ - —
Zircon (G) in barrels 1c. higher.
Zirconium acetate soln., 13% ZrO_2, dms., c.l. 30,000 lbs. min., works lb. .23 - —
Zirconium hydride powd. electronic grade, dms., works lb. 14.00 - 15.00
Zirconium oxide, CP, white, grd., bbls. or bgs. works lb. 1.50 - —
Electric-fused lump, bgs., 500 to 1,999-lb lots, works lb. .48½ - —
bgs., smaller lots, works lb. .51 - —
milled, bgs., c.l., works . . lb. .62 - —
bgs., 5-ton lots, works . . lb. .62½ - —
bgs., 1-ton to 9,999-lb. lots, works lb. .63½ - —
bgs., 500 to 1,999-lb. lots, works lb. .64 - —
bgs. smaller lots, works lb. .66 - —
Glass polishing grade, 94-97% ZrO_2, bgs. works lb. .55 - .85
Opacifier grade 85-90% ZrO_2, bgs., lb. .27 - .50
Stabilized oxide 91% ZrO_2, milled, bgs lb. .62 .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works . . . . . lb. .37½ - —

Jobs & People

Abbott Laboratories, North Chicago, Ill.—**Thomas H. Riggs** has been named to fill the newly-created post of chief of the control division of scientific relations.

Air Reduction Sales Company, a division of Air Reduction Company, New York—**S. N. Peters** has been appointed plant superintendent for an air separation facility now under construction at Johnstown, Pa.

Allied Chemical Corporation, General Chemical Division, New York —**Joseph E. Abhold** has been made superintendent of the Anacortes (Wash.) Works, succeeding **Guy B. Walter** who has retired after forty-three years with the company.

Baxter Laboratories, Inc., Morton Grove, Ill.—**Alexander W. Booras** has been elevated to sales promotion manager of the Baxter and Travenol divisions.

Canadian Chemical Company, Montreal, Quebec — **R. V. C. Aitken** has been made product manager of resale. He was previously product supervisor for intermediates.

Corn Products Sales Company, New York—**Daniel E. Lucas** has been appointed eastern regional sales and service manager for the industrial division.

Davison Chemical Division, W. R. Grace & Co., Baltimore, Md.—**E. R. Johnson** has been named sales manager of nuclear materials.

FMC Corporation, New York—**Donald F. Doehnert** has joined the decorative laminate group of FMC's applications technical service laboratory to serve as a plastics engineer at Baltimore, Md.

Johnson & Johnson, New Brunswick, N.J.—**David R. Clare** has become vice-president of manufacturing and a member of the management board.

Monsanto Chemical Company, St. Louis, Mo.—**Michael A. Blatz** has been appointed assistant manager of eastern public relations with headquarters in New York.

Pennsalt Chemicals Corporation, Philadelphia—**Howard M. Brittain** has been assigned to the Atlanta, Ga., regional office as a technical representative.

Sandoz, Inc., New York — **Hans Seifert,** technical sales representative, has been advanced to sales manager of the chemical division.

Pittsburgh Plate Glass Company, Pittsburgh, Pa.—**Dr. Henry A. Vogel** has been appointed manager of consumer products development, **Dr. Pierson G. Boermans** manager of trade sales technical service, and **Robert P. Ericson** manager of inindustrial coatings development.

Spencer Kellogg & Sons, a division of Textron, Inc., Buffalo, N.Y.— **Daniel J. Healy,** vice-president and a former director, has retired after forty-five years of service.

Stauffer Chemical Company, New York—**Dale Reding** has been appointed sales manager for northern California and the Pacific northwest.

ASTM Alters Its Name To Stress Materials Effort

The name of the American Society for Testing Materials has been officially changed to American Society for Testing and Materials with the signing of a court decree on September 18, 1961, amending the Society's Charter originally granted in 1902 by the Commonwealth of Pennsylvania.

In announcing the change, ASTM President Miles N. Clair says, "The inclusion of the word 'and' in the society's name places added emphasis on the society's research work in seeking knowledge of the nature of materials.

Isoniazid Use Broadened

—Continued from page 7

household contacts of every newly-discovered case of tuberculosis.

"By putting those who have the disease under early treatment and assuring that the others are given prophylactic doses of isoniazid under medical supervision for a year," Dr. Terry goes on, "we can expect a substantial reduction in the over 55,000 new cases and 10,000 deaths from tuberculosis which now occur annually."

Butanol Possibilities

—Continued from page 7

went into operation recently at the Dow Badische Chemical Company complex at Freeport, Tex.

Dow Badische is owned jointly by Dow and BASF Overzee, NV, a German company.

The Freeport production is being marketed domestically through a contractural arrangement with Dow's national sales organization at Midland.

S. H. Mott, jr., the product's sales manager at Midland, said both normal-butanol and iso-butanol are now being stocked at Dow's key terminals and shipments are available on a regular schedule.

The new Freeport plant has a production capacity of 24 million pounds of butanol a year. Its completion boosts the nation's butanol production capacity 10 percent to about 275 million pounds annually.

There are four other producers in the field: Union Carbide Chemicals Company, Eastman Chemical Products, Inc., Celanese Chemical Company and Publicker Industries, Inc.

This is Dow's first entry into the butanol market.

The Dow Badische installation produces butanol with the BASF process. It is based on a high pressure oxo-synthesis, involving a hydrogenation step, and distillation purification.

Paul Flory of Stanford Wins ACS Research Medal

Prof. Paul J. Flory of Stanford University, widely known for his achievements in polymer chemistry, has won the 1962 William H. Nichols Medal of American Chemical Society's New York section.

The gold medal, one of the highest honors in American chemistry, will be presented to Dr. Flory at a dinner in March. The prize is given annually to stimulate original research in chemistry.

Dr. Flory, a member of Dr. Wallace A. Carothers' pioneering research team that discovered nylon, has carried out important studies on the constitution and physical properties of high polymers.

Chemical Battleground: A Promise

--Continued from page 3

on income from foreign investments, and legislation on air and water pollution.

The chemical industry sees the drug bill as the opening wedge to changes in the patent laws affecting all industry.

The patent sections of the Kefauver bill will be subject to public hearings before the Kefauver committee October 16 and the Manufacturing Chemists' Association is mapping plans to enter a vigorous protest against this type of legislation. The industry will be joined by many other protestants.

Water Control Bill Important

Activity on anti-pollution legislation centered almost entirely on the water control bills of Sen. Robert S. Kerr of Oklahoma (S 120) and Rep. John A. Blatnik of Minnesota (HR 6441), which became law in modified form.

This law increases the ceiling on government grants for treatment facilities to $600 million and extends federal controls over pollution to navigable and coastal waters.

The bill finally enacted into law is not exactly what the chemical industry favored, but it is one which spokesmen say the industry will be able to live with.

On air pollution, the senate passed a bill just before adjournment which would lift the ceiling on annual appropriations of research funds, and authorize hearings in cases of air pollution which are of more than local interest.

Another bill affecting the chemical industry is HR 7916 extending the saline water research law for another six years and lifting the ceiling on expenditures to $75 million over this period.

One feature of this bill that may give the industry some concern, however, is a provision for public ownership of all patents and discoveries resulting from government sponsored research into this area.

Legislation providing tax relief for the stockholders involved in the duPont-General Motors antitrust case failed to clear congress before adjournment.

Having already passed the house, the measure ended up as the unfinished business of the senate. This means that it will be among the first items on the agenda when the lawmakers reconvene in January.

Pending at the time of adjournment were a great number of antitrust bills, most of them stemming from the work of the senate and house monopoly investigating committees.

These included the familiar proposals for pre-notification of corporation mergers, empowering the Justice Department to subpoena books and records in civil antitrust investigations and bills to require maunfacturers to grant functional discounts

The outlook for these bills in the next session is doubtful, although there is a chance that the subpoena bill for the Justice Department might get through.

New on the scene this year are five bills for stiffening penalties against antitrust offenders and making corporate executives more responsible for the acts of subordinates.

Hearings Resuming This Week

Hearings are resuming on these bills this week, but their outlook for next session is also doubtful.

Left over for the next session, of course, is the Kefauver-Celler drug antitrust bill. The senator is planning between-the-sessions hearings—in addition to the October 16 hearings on the patent sections—in order to speed up the work and clear the way for action on the bill next session. But things are becoming more complicated concerning the outlook for the bill.

Secretary of Health, Education & Welfare Abraham Ribicoff, during his appearance before the Kefauver committee several weeks ago at which he endorsed most of the Kefauver bill's provisions, disclosed that he plans to submit recommendations for drug legislation when congress reconvenes.

But the legislation he proposes probably will go before the Hill committee on labor and public welfare and thus compete with the Kefauver bill for the senate's attention.

In any event, few people give the Kefauver bill much chance in the next session and no one expects that it will ever get out of the senate judiciary committee in its present form.

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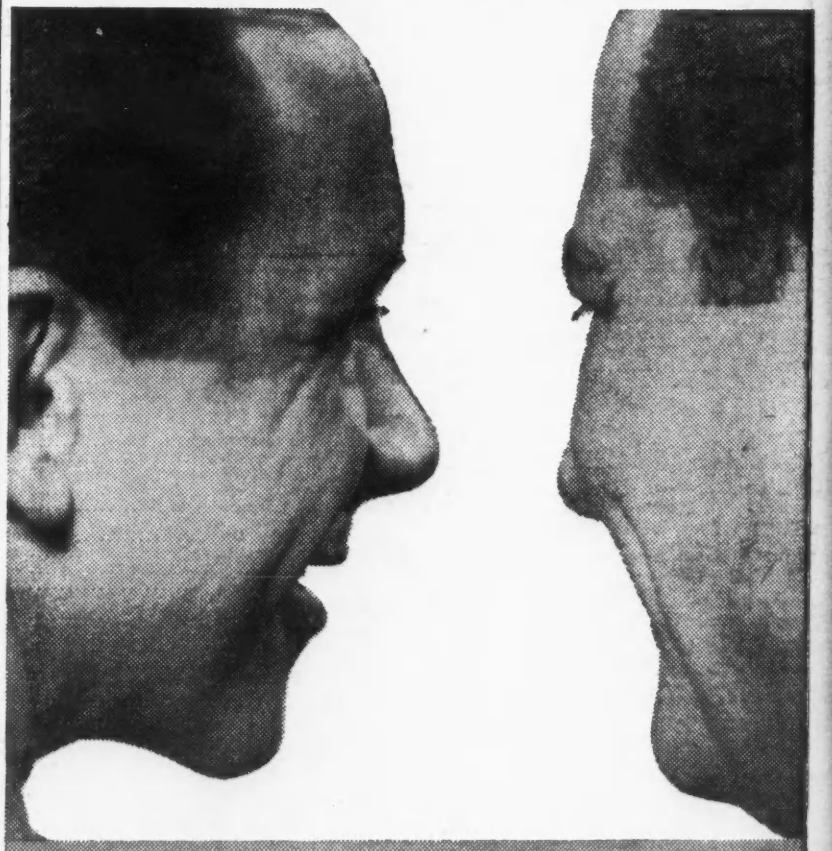

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